THE FARMERS' CABINET,

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

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Above Arch Street,
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"Agriculture is the noblest of all employments, as well as the most favorable to morals. Let the soldier talk of *honor* and *glory*, I see more *honor* in covering the earth with grain and verdure than with dead and mangled bodies, and more *glory* in providing food for its inhabitants than in destroying them."

THE FARMERS' CABINET.

We take great pleasure in laying before our numerous readers the following interesting correspondence. Dr. THOMSON, the Corresponding Secretary of the New Castle County Agricultural Society, has set an example which we trust may have a tendency to draw out from other societies much valuable information on the various branches of agricultural industry. We hope that the plan of obtaining information on this most important subject, by propounding questions to intelligent, practical farmers, through the proper officers of Agricultural Societies may be extensively adopted. If so, and they are promptly answered, as in the present instance, and forthwith published, the happiest results may be anticipated. The great object in the formation of these societies is the improvement of their members in agricultural knowledge. By availing themselves of the opportunities afforded by the establishment of agricultural journals, this information, instead of being confined to a single neighborhood, and making slow advances into the surrounding country, may be immediately and widely diffused throughout all the land.

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For the Farmers' Cabinet.

On Stall Feeding Sheep.

MR. EDITOR:—At a late quarterly meeting of the "Agricultural Society of New Castle county, Delaware," it was requested of the Corresponding Secretary to elicit from *practical farmers* throughout the state, such information and experience on matters connected with *agriculture*, as might benefit and advance the objects of the society, and when deemed of sufficient interest and importance, to publish the same for the use of its members. Many of them are subscribers to your valuable paper, and most of them interested more or less in sheep. The method Mr. Baynes adopts of making *fat mutton* will, no doubt, be interesting to some of them, and the information he imparts may be relied upon—founded as it is upon *experience*.

Yours, very respectfully,
JAMES W. THOMSON.

—

Wilmington, March, 1838.

CORRESPONDENCE, &c.

Mr. THOMAS BAYNES—

Dear Sir:—I am induced from some practical remarks made by you in a late conversation on the subject of *sheep*, and particularly *sheep for stall-feeding*,—to solicit from you still further information on this important branch of grazing—not only for the benefit of our Delaware farmers (who in the prospect of a dog-law, for the protection of sheep, from the next legislature, will go much more largely into the business) but also for the sake of the agricultural interest of the country in general. In all our great markets, *fine mutton* is scarce, and consequently high—it is one of our most *wholesome* meats and if properly attended to, one of the most *profitable* the farmer can raise. But unfortunately for agriculture, the great and leading avocation of man,—too few of its practical votaries impart their wisdom and experience to others by essays and lectures, who so much need their direction and aid. The experience you acquired in England, and the years of observation you have had in this country as the shepherd of that celebrated feeder of fine mutton, SAMUEL WEST, of Delaware county, Pa., will give great interest to any communications from you on the subject—and as Mr. Barney has given a reputation to Delaware *sheep*, which they richly deserve as—among the finest in the country—practical directions

from you, for their treatment, and how they can be best improved and stallfed, will be thankfully received by those who wish to emulate his example—and profit by his valuable enterprise. Below, I have proposed some queries for you to answer at your leisure, on the interesting subject of *feeding sheep*,—without a wish however to confine you to them. Any other information than they ask for, and in your power, I feel assured you will impart and by so doing, much oblige yours, &c.

James W. Thomson,
Cor. Sec. Agricultural Society.

Wilmington, April 8, 1838.

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To James W. Thomson, M. D.

Esteemed Friend:—Thy favor on the subject of sheep was duly received, and I will comply with thy request with pleasure as far as I am able. Samuel West, to whom thee has alluded, a practical farmer near Chester, Pa., feeds about 100 sheep per year—he purchases them in September, and, if possible, selects a mixed breed of Bakewell & Merino, or glade sheep. After getting them home, the first thing he does is to wash them in a clear stream of water to cleanse them from dust or mud which they may have collected in traveling. They are then turned into a pasture pretty well eaten down for a few days, when they are changed to a better one. It is best to change their pasture every week, particularly, if the fields are small. They will do pretty well on grass till December, when they should be housed (see directions in answer to thy 4th question.) The cost of sheep for feeding is generally from $3 to $5 per head, and will mostly sell for double the first cost when fat.

John B. Baynes, of Naaman's Creek, Delaware, keeps a *breeding stock*, the fine quality of which thee has some knowledge. He allows thirty ewes to one buck, which is considered about the right number on a farm of one hundred acres—these ewes on an average will have forty lambs, which at 4 months old are worth four dollars per head. But I should recommend the yearlings kept over which would shear seven pounds of wool on the 40 head—equal to 280 lbs. at 40 cents would be, $112,00

The 31 head of old sheep would shear 5 lbs. wool per head, 155 at 40 cents,	62,00
40 lambs, when fat, at 2 years old—$12 per head,	480,00
	$654,00
The food will cost $1 per head on the 40 yearlings,	40,00
Leaving,	614,00

The farmers' income from his *breeding flock*.

Ewes should be kept well through September and October, and the buck allowed to go with them on the first of October; after this time it is considered best not to keep them too high till towards March when they should be kept better. Potatoes or turneps should be given them till grass comes. Sheep should be washed about the middle of May, if the weather is clear, shear them ten days after. Some of our farmers may not be prepared to purchase a flock of Bakewell sheep. A profitable business can be done, and at the same time a good stock raised by purchasing a few good common ewes and a Bakewell buck—it will greatly improve the breed by changing the buck every year and selling off the old ewes. In three years the breed will be very nearly as good as full Bakewell. If two farmers in the same neighborhood could exchange bucks it would answer as well and be a saving to both parties. I have endeavored to give thee all the information in this and my answers to thy queries below I now think of, yet that I have omitted some things I have no doubt, but am willing at any future time to answer any questions and impart any knowledge in my power to aid thee and the valuable Agricultural Society of the county, whose advancement thee so ardently seeks to further. I remain thy friend,

Thomas Baynes.

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Queries, by James W. Thomson, the Corresponding Secretary, of the Agricultural Society of New-Castle County, Delaware,—with Answers by Thomas Baynes of Wilmington, on the management and feeding of sheep.

Question 1.—What breed of sheep do you consider best, and most profitable for the feeding of mutton, in this and the adjoining States, to purchase, principally for the purpose of fattening?

Answer.—Half Bakewell and half Merino. A breed of sheep from the Glade country, State of New-York, answers very well.

Question 2.—What kind of sheep would best combine the fattening qualities, and yield to the farmer the most valuable fleece?

Answer.—*Bakewell*, viz:—Lambs at six months old, worth from four to six dollars, at 14 months, yield six to eight pounds of wool, worth 40 cts. per pound; at 24 months will sell for ten to thirteen dollars; if not sold, will produce from five to six pounds of wool, and have a lamb—continuing thus, till four years old, mostly decreasing in the weight of wool every year; at four, the fleece will not weigh more than four pounds, when they ought to be fed, and never kept older. It is a rule with good farmers, never to have their lambs before first week in March.

Question 3.—What should be the age of sheep to fatten best, and how is a farmer to know their age, and what length of time does it ordinarily take to make mutton sufficiently good for the shambles?

Ans.—From three to five years old. Their age is known by their teeth. At one year old they have two broad teeth in front; at two years old four, and at three years old six, or a full mouth; after this age their teeth begin to shorten.

They require three months to fatten, provided they are in fair order when purchased.—Six weeks on grass, and six weeks on grain and hay.

Question 4.—What do you consider the best food for stall feeding sheep, and how much food should be given to each sheep daily during the fattening process.

Answer.—Corn, oats and potatoes, with hay. It is necessary to be cautious at the commencement; the food should be three-fifths corn, to begin with half pint to each sheep, daily for five days, increasing gradually to one pint for five days more, and 1½ pints for five days after, when one quart can be given with safety. It is best to give a few potatoes daily, say two bushels to every hundred head.

Question 5.—Is salt essential to sheep at this time?

Answer.—They ought to have it to go to at pleasure.

Question 6.—How many sheep, with advantage to the farmer, and their health, can be fed on a farm of from 100 to 300 acres, and how many can one hand feed and fodder?

Answer.—One hundred is considered a sufficient number for a farm of 200 acres, to be fed in three separate flocks. In England one sheep to every head of cattle is the rule. The labor is very trifling, one hand can attend 100 in 1½ hours—½ hour morning, noon and night—Be *punctual to the time of feeding, it is of importance.*

Question 7.—Should fattening sheep be kept housed or suffered to run at large, and whether it is necessary to have any particular form for shelters, racks, or enclosures, for fattening sheep?

Answer.—Every farmer should have at least one sheep-house, to be two stories high; the upper story for hay in part, and to prepare their food in the lower story, open to the south, with a yard attached to it twice as large as the house, or to contain twice as much ground as the house stands on. The rack and trough to run around the inside on the lower floor, four feet from the outside wall, to allow a passage; a small trough to be placed at the bottom of the rack, six inches broad and four inches deep, two feet from the floor. The racks must be perpendicular, to prevent the hay seeds getting into the wool, and slope the back of the rack; two feet will be sufficient for the height of the rack from the trough. The hay is given them from the passage over the back of the rack, but the food must be taken inside and carefully placed in the trough, even all along to prevent any one from getting more than his share. It is necessary they have water twice every day. If they go out to water never allow them to be out more than two hours at a time. The pen should be kept well littered.

Question 8.—What are the diseases to which fattening sheep are most liable, and what are the proper remedies?

Answer.—The disease most common is rot or lax—the best remedy known for it is half pint of equal proportions of soot and salt. When sheep are feeding high they are subject to a disease supposed to be a species of cholic, the best remedy is to bleed at the eye vein, and give an injection composed of lard, molasses, and warm water; an injection is very good when they are too costive, but this never occurs when they have their proportion of potatoes, turneps or sugar beets.

When sheep get torn with dogs, or by any accident rend the skin, the wound should be well washed with warm milk and water.—Stitch up the place and bathe it with tincture of Cayenne pepper or spirits of turpentine.

Sheep are at times subject to foot rot or foul-claw; this can be mostly cured by placing in their path *quick lime* three inches deep, so that the lime will go well up between their hoofs. If this should fail, clean well their feet with a dry cloth, pare off the superfluous hoof, and apply butter of antimony; if it is still unmanageable they had best at once be sold, and then if care is not taken to clean well their pen, &c., the next flock will take it as it is a contagious disease. Scab is a disease more common in Scotland and north latitudes; it is scarcely known in this country. The best remedy for it, is the oil of tar, placed in the wool on the back; a small quantity is sufficient.

THOS. BAYNES.

For the Farmers' Cabinet.

Application of Marl.

On reading the last number of the Cabinet I perceive that your readers in the lower part of Delaware and the Eastern shore of Maryland, where the green sand or marl abounds, are desirous of being informed of the best mode of applying it as indicated by the experience of our New Jersey farmers. It may perhaps save those who are inclined to try it, some trouble and expense to be informed that every known method of applica-

tion seems to have been resorted to; and that which has been found to answer best, is to use it as a *top dressing* on sward or grass grounds; the effect is immediate and great, being scarcely to be believed excepting by those who have been spectators of its effects. The quantity applied to an acre of good marl is from six to twenty tons; a bushel weighs about a hundred weight, of course, a ton is about twenty bushels; more may be applied without any apprehension of injury, but from twelve to fifteen tons per acre is a good dressing, though some have applied twice that quantity. Spread it evenly over the surface of the grass ground in the fall, winter or spring, or whenever you have most leisure, and when done you need not give yourselves any further trouble about it; nature will do the rest, and your reward will be certain and great if your marl be good. Whenever you plough down your grass ground which has been thus marled for corn, or any other crop, you will see the effect of it strikingly exhibited in the subsequent crops. It has frequently increased the fertility of the soil more than ten fold, and some crops are believed to be much improved in *quality* as well as *quantity* by its application.

The great weight of the marl causes it to sink in the earth, and if it should be ploughed in on its first application, there is some danger of losing part of the good effects of it, by its being placed too remote from the roots of the plants intended to be nourished by it.

It is now agreed on by all, that the fertilizing ingredient of this valuable substance is potash, and the benefits derived from its use are directly proportional to the quantity of it contained in its composition.

EVESHAM.

April 20th, 1838.

For the Farmers' Cabinet.

Stall Feeding, &c.

MR. J. LIBBY:—It is evident that the remarks of your correspondent "Agricola" in the last number of the Cabinet, [No. 38,] are intended to apply to my production, of the same number. Interspersed as they are, with "Beets" and "Hollow Horn," the device is shallow and insufficiently masked.

"Agricola" *may be* a "Farmer" and know how to estimate "Economy;" but he has risked assertions which I am fearful he will fail to prove. His first is "Farmers often state that the grain fed to cattle or hogs would have sold for more than the animals have brought after they were fattened."

"But," says he, "the complaint, if it be a just one, has its origin more in the extravagance and waste arising out of the mode of feeding, than from any other cause. The general practice is to feed with whole grain in its raw state."

I have never read any such statement in any agricultural work that has yet fallen into my hands; yet it may have been stated—and if "farmers often" make such statements it would be well to inquire into the "facts" before we put forth the sweeping denunciation, that the "complaint has its origin more in the extravagance, and waste, &c. than from any other cause."

If "Agricola" will take the trouble to inform himself on the subject, he will find that many intelligent cattle feeders, in Chester county, have lost considerably on their cattle fed through the last winter; nor is it their "general practice" to feed with whole grain; it is generally ground. But in estimating the expense the toll actually taken out at the mill is also included.

Hogs are more frequently fed upon whole corn, and are found to be efficient masticators and digestors.

Steaming or boiling might render a less quantity sufficient, but I doubt its being economical where farmers feed only their usual number—a considerable addition of labor and some fuel would be had in requisition for either.

The "Maryland Farmer" who made his corn meal into mush and thereby saved one-half, has yet one other experiment to try, to be equal to the honest Hibernian with his two stoves, let him make it into something else, and he may, possibly, save it all. At any rate, it appears, that from stubborness or some other cause, Pennsylvania farmers will not adopt the plan, for "Agricola" says "the experiment above referred to was published at the same time in several agricultural journals, so as to give it publicity, but farmers generally have gone on in the old way of feeding, notwithstanding." Another experiment went to show that a horse was fed for a time on whole oats; the plan was changed, and "it resulted in proving the fact that one-half the quantity *crushed* kept the horse in better order." It might be so with an old horse that had no teeth, but in Pennsylvania we feed such on mush, &c.

I am very favorable to the sugar beet, so much so that I would recommend to every farmer the raising of a few bushels to give his cows through the winter and spring months. His reward will be in the quantity and quality of the milk and butter, and the improved condition of his stock.

"Agricola" says "it is a very remarkable fact, that in Great Britain no disease under the name of Hollow Horn is known, which

some ascribe to the universal practice of feeding cattle with a portion of succulent food daily, during the winter season."

"Agricola" may be correct in saying that "in Great Britain, no disease under the *name* of hollow horn is known;" but had he stated that no such disease as that called hollow horn in this country, is known in Great Britain, it would have meant something else. The same disease, under different names, exists in both countries.

After the able discussion between "Observer" and "Subscriber" of this very interesting subject, it might appear superfluous in me to attempt any thing further—but I feel persuaded that the length of their discussion will prevent many farmers from reading it, and am of the opinion that enough might be said in fewer words. I have had some experience with the disease commonly called hollow horn, and believe I have cured several animals that had it. I learned from an experienced farmer, who still pursues the plan successfully.

The early symptoms of the disease, as I have noticed them, generally are—dullness in the countenance—falling of the eye-lids—loss of appetite—slowness of motion—hanging of the head—sometimes coldness of the horns, at other times more than the natural heat—shaking of the head, &c.

If the disease has progressed a little farther, frequent discharges from the nostrils will take place—afterwards, it may be observed that these discharges have stopped, and though the animal has become more restless; no doubt, the matter has collected in the horns so as to prevent the natural circulation of the blood, as the horns at this stage of the disease will feel cold.

In any of these periods (though the earlier the better) I would proceed as follows:—Secure the animal firmly to a post, with a good strong rope, having furnished yourself with a gimblet of the size between a spike and a common nail gimblet, a vessel containing about a quart of milk warm water, and a handful of salt, and a syringe of metal or common elder, the former is preferable, proceed to bore the horns about three inches from the head and inject the solution, until the horns and nasal passages are completely cleansed—you may, perhaps, have to repeat the operation to effect a cure, unless you may have discovered the early stage of the disease.

If you have been so fortunate, and apply the above remedy, the probability is, the blood will resume its circulation in the interior of the horn and it will become healthy—the holes you have made will close up, and the animal may live a dozen years afterwards without again having the disease; but if the worst stages of the disease should precede your remedy the blood will not again circulate in the horn, and it will remain dry and empty, though the animal may live and in every other respect, do well. As we are subject to take "cold" from imprudent exposure, however well we may be fed, so I am of the opinion that cattle, however well they may be fed, when much exposed to cold and wet, are liable to take the disease called Hollow Horn. Very respectfully,

J. J. M.

Chester County, April 1, 1838.

The following communication was read before the Philadelphia Society for Promoting Agriculture, at its regular monthly meeting, April 18, and ordered to be published in the Farmers' Cabinet:

Stall Feeding Cattle.

To the Philadelphia Society for Promoting Agriculture.

Believing that the cause of agriculture may be promoted by practical observations and statistical facts, and that theories and principles should be based on these, I beg leave to communicate a statement regarding four bullocks which I have had the pleasure of bringing to a high degree of perfection. One of these steers was admitted to be one of the fattest ever exhibited in the Philadelphia market, and the others very little inferior to him. By the annexed statement it will be seen that the result, of between two and three years stall feeding, has been to pay me full prices for the grain, beets and hay consumed, and allow the manure for straw and labor, a result that I think would satisfy any reasonable farmer or grazier.

At the same time to succeed well with feeding large cattle, it is necessary, that they should be kind and good feeders. They should also be attended with especial care. Without these pre-requisites the farmer had better sell his grain than stall feed cattle.

ISAAC W. ROBERTS.

L. Merion township, Montg. Co., Pa., April 17, 1838.

Statement to 1st May 1836.

Nov. 15, 1835, bought two steers, estimated at 1750 lbs. dead weight—cost	$110 00
Commenced stall feeding them on the 1st Dec. and continued 150 days at 27 qts. per day or 126 bushels at 70 cents	88 20
They consumed two tons of hay at $16	32 00
The grain consisted of equal parts of corn and oats, ground; or corn and "mill stuff," or wheat bran. On the 1st May 1836, turned them on grass with a pair of oxen, estimated weight 1850 lbs. and valued at	230 20
	$150 00

Statement from 1st May 1836.

Cost as above of the four cattle	$330 20
Pasture during the season for the four	80 00
Commenced feeding grain on the first of October, twice a day, till 1st Dec., and then three times per day till 1st May,	

1837, equal to 190 days full feeding of 2 bush. per day or 380 bushels as above, at 70 cents.	$ 266 00
100 bushels Mangel Wurtzel Beets at 25	25 00
5 tons Hay at $16	80 00
	$ 831 00
Grass during the summer of 1837	80 00
Commenced feeding grain on 1st Sept., 1837, twice per day till 1st Dec, and then three times per day till 19th Feb., say 140 days full feeding or 280 bush. at 70 cents,	196 00
100 bush. Mangel Wurtzel, at 25 cts.	25 00
3½ tons Hay, at $12	42 00
	$ 1174 20

On the 19th Feb., 1838, sold them to Messrs. Drum, Wartman & Co., Victuallers, for $1200. In the spring of 1836 the two steers would have sold for $240, and in the spring of 1837 I estimated them at current market price as worth 750, and if then sold there would have been an apparent loss, but it should be remarked in explanation, that the stall feeding extends to the first of May, whereas the season for selling is the middle of Feb. to 1st March, when their cost was about what I estimated them as worth to the butcher.

RECAPITULATION.

First cost of the four cattle,	$260 00
Pasture during two seasons,	160 00
Grain fed to them 786 bush. at 70 cts.	550 20
Mangel Wurtzel 200 bush. at 25 cts.	50 00
7 tons of Hay, at $16,	112 00
3½ tons of Hay, at $12,	42 00
	$ 1174 20

And being sold for $1200 gives as before stated the manure for straw and labor, leaving a balance of $26 and paying me a liberal price for the produce of the farm; about two thirds of the grain consisted of equal measure of corn and oats, and one third was corn and mill feed.

By the foregoing statement it appears that the average increase in value of each animal was about $100 per annum.

STATEMENT OF WEIGHT AND GIRTH.

STEERS.

	Live weight	*Dead weight*	*Girth.*
No. 1.	2422 lbs.	1671 lbs.	9 ft. 1 in.
No. 2.	2324 "	1613½ "	8 " 9½ "
	OXEN.		
No. 3.	2555 "	1691 "	9 " 2½ "
No. 4.	2261 "	1533½ "	8 " 9 "

Cultivation of Sugar Beet.

The following letter, addressed to a gentleman of this city, has been politely handed us for publication:

Philadelphia, March, 1838.

Dear Sir:—Mr. Lovering's experiments are decisive of the fact, that beet sugar of superior quality to that imported from France, can be made from roots grown in this country, and that too under very unfavorable circumstances. It is satisfactory also, to find that his results, as to quantity of saccharine, &c., agree with the statements contained in your published report. There can be no doubt, therefore, that large quantities of this invaluable root will be grown this year, for the purpose of sugar making, as well as for the feeding of cattle, than which a more profitable crop cannot be raised: and as the time for sowing the seed is fast approaching, perhaps you will permit me to offer a few remarks on the best mode of conducting that process, upon which so much of the success of the result depends.

Chaptal, in his "Chemistry applied to Agriculture," recommends the English mode of culture, which consists of throwing the land into ridges, placing the manure in the trenches formed by the operation, and then splitting these ridges by a double plough, by which the dung is covered with a pulverized soil; and upon the ridges so formed, the seed is sown, either by hand or drill; so that the plants will stand immediately over the dung, which their roots will soon reach, and by which their growth will be astonishingly accelerated. This is, decidedly, the best mode of cultivation, and if the ridges are formed two feet apart, it will give sufficient space for the working of the plough or cultivator, in the after clearing of the crop. This method of sowing on the ridge is practised in the growing of turneps, by that best of Agriculturists, Mr. Walker of Holmesburg, with what effect, all who have the happiness of knowing him can testify; his mode too, of thinning the plants by hand, leaving only the strongest to form the crop, is admirable. Could you not induce him to give some details that others might "go and do likewise."

If therefore, let me repeat, the rows be two feet apart, the land might be kept clean by the plough, the operation of which will be found of immense advantage to the future well-being of the crop; the roots might stand 12 or 14 inches distant in the rows. Sow about eight pounds of seed per acre, this will give a sufficient number of plants from which to select the strongest for the crop; no practical man can endure to hear of *transplanting* and *watering* with the view of saving seed, &c.; it is better to sow largely, and thin the plants, selecting the strongest only.

It has been ascertained by experiment, by one whose judgment in this matter will be considered as decisive by all who know him, Dr. Gibbons, of Wilmington Del., that a crop of sugar beet can be raised with as little labor and expense as a crop of corn. Estimating then, the value of an acre of corn at $40, and the crop of sugar beet 40,000 lbs. p. acre at a fair price, (they sell readily in France for 20 cents per cwt.) the difference in the value of the two crops must satisfy any one; but when to this is added the advantage of the beet culture to the succeeding crops, and

the spirit of improvement which it engenders, the difference is incalculable. In France the beet is a fallow crop; it might be grown for many years in succession without impoverishing the soil, nay, it is found to be meliorating, especially in dry, burning soils, which are kept moist and cool by the shade of the large and spreading foliage.

With best wishes for the success of an undertaking which must have cost you much labor, time, and I fear I may add *money*, but which could never have been brought about by any other means, I trust the time is not distant when you "*shall look on the labor of your hands and be satisfied.*" I am, dear sir, most truly yours,

JAMES PEDDER.

For the Farmers' Cabinet.

Feeding Cattle, &c.

It is important to a farmer to know not only how to render the soil the most productive of grass or grain, but also to know how they can be fed to animals so as to keep them in good condition at the least possible expense, or how the greatest possible quantity of meat can be laid on them, in the shortest period of time, and most economically.

The process of nutrition is now so well understood that it is admitted by all, that in order to obtain the greatest advantage from food of any kind, it should be so prepared that the organs of digestion may obtain complete control over it, so that all the nutricious parts of it may be absorbed and carried into the circulating system and deposited in the form of flesh or fat. Besides having the food of a proper kind and duly prepared, and the animal in good health, it is essential to keep him quiet, both mentally and bodily, so as to be perfectly at ease, without any internal or external irritation that can possibly be avoided. Numerous cases might be produced which show conclusively the difficulty of fattening animals when under the influence of much excitement. The familiar one of sheep, which have been chased or worried by dogs, is well known to most farmers; as they never fatten kindly or do well afterwards; which is supposed to arise from continual apprehension of danger, so that they neither feed well or sleep soundly, and the latter is as necessary to the taking on fat kindly as the former. The same laws govern the human race, as the brute creation in taking on flesh, for we never see fat persons who are not good and sound sleepers. A good farmer and grazier, whose land is passed through by a rail-road, stated that his stock did not feed or fatten well when in the fields adjacent to it, in consequence of the excitement and alarm produced by the passage of the locomotives and the trains in their frequent transits over it.

This to some may appear ridiculous, but those who have carefully investigated the causes which retard the fattening process will be inclined to admit, that it may exercise a very important influence, particularly with very wild or very timid animals. A circumstance having a very important bearing on this subject, was related to me within a few days, by a worthy and excellent farmer of Montgomery county. He stated, that he had a shed in his barn-yard adjoining a public road, under which he had for two years past undertaken to stall feed some cattle, but without success, although the plan of feeding was according to the most approved rules.—It was finally supposed that something pernicious was given to them from malicious views which retarded their increase in flesh; in consequence of this, one of them was put into a stable and kept closely confined and fed as usual, when he did well and soon became excellent beef. On further examination and reflection respecting the cause of the failure under the shed, it was noticed that the poultry roosted there, and that the vermin from them had been communicated to the cattle, which kept them in a continual state of uneasiness and irritation, and this was no doubt the reason of the failure to fatten them in that location. An adjoining neighbor fed an ox nearly all the past winter, contiguous to the hen roost with the same result, having lost all the winters' feed before he discovered the cause of his want of success. The same person experienced a similar result in the case of a hog last autumn, and the cause was not discovered till he was killed, though he was very thin, when it was ascertained that he was lousy. In the case of lice, on domestic animals, tobacco juice it is believed would destroy them; but every precaution should be used to prevent animals from being brought into a situation where they would be likely to become infested with them. Keep all your animals clean, and they will thrive and do better. In a state of nature, all animals preserve themselves clean; it is only when brought under the dominion of man and their habits are changed, and it becomes impossible for them in compliance with their natural instincts to preserve themselves free from filth, that they suffer much by it. Don't permit poultry to frequent or roost in your stables, or near your *cattle* or *hogs*, or you will soon sustain a greater loss by it than they are all worth. A suitable hen-roost should be provided by every farmer, remote from other animals, and a proper place allotted for them to rub and dust themselves, to free them from vermin at all seasons of the year—of course it should be under cover.

A. B

For the Farmers' Cabinet.

Rotation of Crops.

System is as important in farming as any other business; without it, confusion, disorder and loss will be the inevitable result. Fifty years ago there was no regular, rational systematic rotation of farming pursued in what are now the best cultivated districts of Pen'a. The consequence was a regular and constant deterioration of the soil, producing less and less annually, till starvation and want seemed to be inevitable, in many sections of country, that are now in a very high state of cultivation. The introduction of red clover, and plaster of paris, with a judicious rotation of crops gave rise to the astonishing improvements which have taken place within forty or fifty years. The soil gradually became enriched and regenerated under the improved system, and its increased products enabled its owners still further to add to its fertility; and how far this plan of progressive improvement is capable of being carried, has never yet, that I have ascertained, been determined; but many of us have lived to see farms, that yielded but a very scanty support to a single family, under the old way of cultivation, now not only support in affluence, three, four, or five families, but furnish the means of enriching them all, by the adoption of the modern improvements in agriculture. Recently meeting with an intelligent farmer from the lower part of Delaware state, and falling into conversation with him on the subject of a proper rotation of crops, I was not a little surprised to find that the system which with us has enriched both the soil and its proprietor, should not have found its way into that part of our common country; but that the old plan of empoverishing the land and diminishing the resources of its owner should still at so short a distance from us be pursued to a very ruinous extent. At the particular request of my friend, who informed me that you had many subscribers in his vicinity, I consented to furnish for your Cabinet a statement of the rotation of crops which is generally adopted by the best and most successful farmers in the best cultivated parts of eastern Pennsylvania. After a grass or clover field has been mowed one year, and the next succeeding year been used for pasture, it is broken up or ploughed, either late in the autumn or early in the following spring and planted with Indian corn, which is cut off in the fall and the field ploughed as before either in the fall or following spring, and sowed with oats or barley; and immediately after the harvesting of the oats or barley, the ground is ploughed, manured and sown with wheat.

Grass seed should be sowed on the wheat early in the spring, and if timothy is intended to accompany the clover, it had better be sowed in the fall, and the clover, orchard grass or herd grass seed sowed early in the spring; and be sure not to be too sparing of the grass seed, for much loss is often sustained by not putting it on thick enough, particularly as the clover in some soils is often injured by the winter frosts, and then it is important to have plenty of timothy, orchard grass, or herd grass roots to supply its place.

The spring following the wheat crop, plaster of paris should be applied, say one bushel to the acre, most of our best farmers consider this to produce as great an effect as any larger quantity. This season cut the grass for hay, and the next succeeding season pasture the grass and in the autumn it may be again ploughed for corn the following season, and proceed with the same round of crops again in the same order; but if the farm should contain a sufficient number of fields, and the grass be well set, it may be pastured a second year before it is broken up for corn. The first is a five year rotation, the latter six.

The best time for applying lime or marl in this rotation of crops, is believed to be in the fall, after the wheat crop; applied as a top dressing on the young grass or clover. In this mode of application, its effects are very conspicuous in the increased quantity of grass the first season, and when the sward is broken up for corn the effect of the lime or marl, on that crop, will be much greater than if they were applied to it the same season.

Agricola.

April 24th, 1833.

For the Farmers' Cabinet.

Peach Trees.

I am sorry to see it recommended in No. 39 of your Cabinet, to put *coal ashes* round the roots of *peach trees*, to protect them from insects. Some years ago, when living in the country, I obtained peach and plum trees from Philadelphia, and having heard of the use of coal ashes, I applied them as directed by your correspondent. The trees all became sickly the first summer, and one died.

Suspecting that the ashes were the cause, I dug to the roots and found them all rotten as far as the ashes reached. Some of my neighbors told me that they never applied ashes, whether coal or wood, till they might be thoroughly leeched; that is, till all their causticity might be washed away.

The method which I subsequently adopted and found both safe and effectual, I learned from one of the first four volumes of the "Agricultural Society." Dig away the earth so as to lay bare the superficial roots, and then encircle the trunk of the tree with rye straw, the butt ends in the ground; tie this in several places firmly to the tree and cover up the butt ends with the removed earth. The straw need not be more than one foot long, nor need it be applied very thick.

When you plant a tree, look very carefully for worms, and then be sure to apply the straw before the first of June. But if the tree has been planted more than one or more summers, then dig away the earth down to the superficial roots and search for worms. If gum exudes from the bark, it is almost certain that the enemy is there, and he is to be sought out with a sharp pointed knife, even if it be found necessary to cut away a good deal of the bark; the wound must then be carefully crammed with well-wrought tough clay and the whole covered with the straw. These wounds will heal more quickly if made about the first of May, when the sap begins to flow freely and there is a long season of uninterrupted growth.

The worms are small and white, with a red head. They are the offspring of eggs deposited there by a fly the previous summer. They sometimes completely girdle the tree, that is, eat away the bark through the circumference. Nothing is more easy than to prevent all this evil, by the means above mentioned.

I have said above that about the first of May is the time to wound trees with the least injury. This is the fact, and hence I am sorry to see axes and saws and chisels employed in almost every street, square and garden in this city, during the winter. Wounds which would soon heal if made in May, will ever remain a rotten stump if made in the autumn or winter. Let the wound be made very smooth with a sharp instrument, then the sap flows freely, a glutinous and congenial covering is formed, the long growing season succeeds, and before winter the process of healing is far advanced, if not completed. S. J.

P. S. The trees of your correspondent may have been too large to be seriously injured by the ashes; mine were young trees, some just planted. But whatever is deadly to the young, cannot be wholesome to the old, though to these it may be less fatal than the worms.

Peach Prospects.

We are happy to learn from Delaware, now becoming celebrated for its *fine peaches*, that although the cold weather and frosts have been most trying on the young fruit, and much of it injured, that there is yet *enough spared* to promise a fine crop—if no future frosts should occur to nip the tender blossoms just bursting from the bud. The great success of Messrs. Ridgeway and Reeves, near Delaware City, (and who does not remember their fine and luscious peaches of last summer!) will soon be followed by other equally enterprising gentlemen of Delaware and this city who have gone largely into the business.

On the Union Farms, near Wilmington, owned, we understand, by Dr. Thomson of that place, and Mr. M. Eayre of this city, we learn that about 100 acres immediately on the river Delaware, are now flourishing in peach trees, and that about one half will bear this year, and that by a late arrangement our esteemed fellow-citizen, I. Reeves, for whom peaches *will always grow*, has become a partner with these gentlemen in their large concern. Philip Reybold, Esq., the efficient President of the Delaware Agricultural Society, has also, we understand, set out this spring a large orchard. We sincerely wish all these gentlemen the success they merit. Some of the fine peach districts of Jersey, seem of late years to have lost their power of producing, and continuing long lived, the tree that produces this best, in its season, of all fruits. We should like to hear from some of our Jersey subscribers if they can give us the reason, why it is so—and if any clue has yet been found into that most insidious and fatal disease to the peach tree, *the yellows?* We hope this hint will be kindly taken, and that all the information that can be imparted to us may be given for the benefit of the readers of the Cabinet, on the interesting subject of rearing and of prolonging the existence of the peach tree. A full and generous supply of this luscious and wholesome fruit, is a matter of great interest and luxury to every one, and our populous districts and cities should not hesitate to hold out the highest premiums and inducements to those who propagate fruit and supply our markets with the finest varieties.

For the Farmers' Cabinet.

Capons.

The propagation of poultry, is an item in the common concerns of husbandry, very much overlooked or neglected. Indeed, the greater part brought to our markets, may be justly placed to the account of accident, as the farming community give themselves very little trouble or thought on this subject, except it be in autumn, when they are about making up a load for market.

The high price and increasing consumption in our Atlantic cities, is certainly of sufficient importance, to induce a more pointed interest on the part of our farmers, as to the proper mode of rearing and increasing this truly valuable article, the dunghill fowl.

In taking the liberty of aiding my fellow citizens in this particular, I hope to be excused for suggesting a course of observation for their future benefit, under the confident impression, that they will be abundantly compensated both for the time and attention they may devote to this matter.

In the first place select a breed of large

fowls, give them comfortable accommodations, and at the setting season, select almost exclusively the *sharp pointed* eggs, as they invariably produce the male; these when at *puberty* should be *emasculated*, which will convert them at once into Capons.

This alteration will in about a twelvemonth nearly double the size of the bird, and proportionably increase its value as an article of sale.

This knowledge may be readily acquired, by performing a few experiments upon the dead subject. In France and Italy among the peasantry, this work is almost exclusively allotted to children, who manage it with dexterity.

In a general view of this subject, a great deal might be said; but the foregoing is quite sufficient, to such who are adepts in taking a hint, on matters at any rate relating to their own pockets. Civis.

4th Month, 1838.

For the Farmer's Cabinet.

Top-Dressing.

A communication in the Cabinet of last month on the subject of manures, particularly recommends the practice of top-dressing with all mineral substances used for the purpose of promoting the growth of plants; for instance, gypsum, lime, ashes and marl.—This, so far as my experience or observation extends, is undoubtedly correct, and several intelligent and successful farmers with whom I have conferred on the subject, concur in the soundness of the practice as justified by the results of their own experience. The most beneficial and permanent effect I have ever witnessed from the application of any substance to the soil, was that of *mortar* from an *old building* which was taken down about forty years ago; this was hauled out and spread over several acres of land, as I thought at the time to little purpose, but in this I was much mistaken, for its effects were truly astonishing, and the ground where it was placed can be discerned by its superior fertility at this remote time. It is much to be regretted that so much mortar from old buildings is lost to agriculture by culpable neglect or ignorance; for with a little attention and industry in the neighborhood of our large cities, where the spirit of *pulling down* prevails so extensively, enough of this valuable article might annually be obtained to fertilize some hundreds of acres, and more than double their products. As respects top-dressing with stable manure, there are some facts within my knowledge which seem to recommend it to the favorable regard of farmers. During the autumn of 1836 a friend of mine prepared his ground for wheat in the usual manner by hauling out his manure and ploughing it in, excepting a portion of the field where the manure was not applied till after it was sowed, when it was spread evenly over the surface as a top-dressing and left without further care. On the arrival of harvest the succeeding summer, when it will be recollected there was a general failure of the wheat crop, the part which was top-dressed furnished a full crop, and that portion of the field which was managed in the usual way by ploughing in the dung, partook of the general failure of the country. The land was of the same quality, being part of the same field and treated in every respect in the same way, excepting that the successful part was top-dressed, and the manure put on the other part was ploughed in as usual. The soil was that which is esteemed of the best quality for wheat, and the general treatment of the most perfect character. Facts are said to be stubborn things, and I throw these into the common fund that your numerous readers may test them by their own experience, and furnish the results so that we may obtain additional light on so important a subject as that of the best mode of applying manure to the soil, for there is always a reason why one way of doing a thing is preferable to another.

Montgomery.

For the Farmers' Cabinet,

On the deposite of Moisture on Plants.

Where plaster of paris, ashes, lime or marl has been applied on alternate ridges or lands of clover or other grass, the vegetation will be found in the early part of the day to be covered with moisture or dew, and it sometimes appears as though a smart shower of rain had fallen upon it, even in clear weather, when the parts of the field where its application was omitted are quite free from sensible moisture. Those farmers who have been in the practice of top-dressing, cannot have failed to have noticed this apparently extraordinary circumstance.

The usual method of accounting for this accumulation of moisture, where the dressing has been resorted to, is the attraction on the part of the substance applied for the humidity of the atmosphere, and that where its application has been omitted there is nothing to attract, and consequently the grass remains comparatively dry under the same state of the air.

This theory I take to be entirely erroneous, and calculated to lead us astray in regard to the mode of action of those substances, in promoting the growth of plants. I shall therefore state what I suppose to be the true cause of the accumulation of moisture under the circumstances alluded to, without resort to attraction, which, I apprehend, has nothing to do with the affair whatever.

The dressing applied is washed down and partially dissolved, and the solution carried to the absorbing roots of the plants, and furnishes them with a wholesome nutriment, which produces a healthy and vigorous growth; whilst those plants to which it is not applied remain puny and sickly for want of a full and generous diet. The vigorous plants transpire freely and throw off much moisture during the day, which has been absorbed from the earth with their food. This free transpiration carries off the excess of heat from the leaves, and materially reduces their temperature below that of the surrounding atmosphere, during very hot weather, when a condensation of moisture from the air takes place by robbing it of some of its heat, for the same reason that a glass or pitcher of water soon becomes coated with moisture on its outside under similar circumstances. The sickly or half starved plants which have not had a full meal, or generous diet bestowed upon them by a dressing, acquire a temperature nearly or quite equal to the surrounding atmosphere, and consequently the precipitation of moisture on them is so trifling as not to be much or at all observable. Dead animal, or vegetable matter acquires the same temperature as the adjacent air; but organized living matter, of either kind, during the very hot weather of our summers is generally below the range of temperature of inanimate matter exposed to the solar rays; provision having been wisely made by Divine Providence, for protecting animals and plants from the effect of too great a degree of heat, by the evaporation of moisture from their surfaces carrying off the excess.

The presence of an abundance of dew on plants, early in the morning, I presume, will always be found to exist in very warm weather, provided they have been furnished with a copious supply of suitable nutriment, *of what kind soever*, to preserve them in a state of perfect health and vigor, and *that* without reference being had to any supposed attraction in the manure which may have been applied to them. The quantity will be duly proportioned to the extent and expansion of the foliage—clover, when in health, having a larger surface of leaves than many other grasses, will, of course, display a greater amount of dew of a morning. Should the above theory not be satisfactory, the writer will feel obliged by any of your correspondents furnishing a better one for publication in your valuable Cabinet. X.

Splendid colored portraits of the large cattle, the Duke of Gloucester and the Earl of Jersey, raised and fattened by Mr. Edward Tonkin, of New Jersey, may be obtained at this office. Price, $1.

For the Farmers' Cabinet.

A Large Calf.

Mr. Libby—*Dear Sir:*—In the Baltimore Farmer and Gardener, I observe a statement of the weight of several fine animals, the stock of Mr. Beltzhoover, a farmer of skill and enterprise. Among them the most surprising appeared to me that of a Durham calf three months and seventeen days old, the weight of which was 450 lbs. It induced me to try the weight of a calf that I am raising, four months old this day, and the result is very little behind that of Mr. Beltzhoover. Mine weighed 462 lbs. being twelve pounds heavier, with thirteen days more age than his. It may be of some interest to your readers to know the stock and manner of treatment. It is a bull calf, 3-4 Durham; sire Col. Powell's full blooded bull Frolick; dam a 1-2 Durham of fine form and size, a remarkably good milcher, and like this celebrated stock, when well treated, always in good condition; gr. dam a full blood imported cow that I am assured yielded 10 lb. of butter per week. Until three months old the calf had nothing but its mother's milk, and a very little soft hay. During the last month it has had, in addition, Indian meal and wheat bran, but eats very sparingly of them. The rapid growth and great size have been produced almost entirely by the sustenance of his dam. It has been well housed, and frequently rubbed, and kept constantly in the stable. The weight was much greater than I anticipated, yet I am convinced it is no more than may often be obtained from the improved short horn stock. My neighbor, Dr. Geo. Uhler, has a full blooded calf, five months old, from his imported cow, and my brother, J. W. R. has a 3-4 Durham 4 1-2 months old, each of which are nearly if not quite as heavy as mine, and are both beautiful animals.

The readers of the Cabinet would doubtless be gratified by some information regarding Mr. Beltzhoover's mode of raising stock and hope he may be induced to favor the public with a statement, *pro bono publico.* I trust, sir, that in a few years this improved breed will be as common in the vicinity of Philadelphia, as it now is near London and Liverpool, where Durhams are preferred because they yield more profit as milchers and feeders than any other description of cattle.

Yours &c.

Algernon S. Roberts.

Phil. Co. April 5, 1838.

The regular monthly meeting of the Philadelphia Society for Promoting Agriculture, will be held at the Philosophical Hall, Fifth, near Chesnut street, on Wednesday, the 16th of May, at 11 o'clock, A. M.

For the Farmers' Cabinet.

Sugar Beet for Milch Cows.

In the last number of your Cabinet, there is a recommendation of the *sugar beet* as food for milch cows.

When living in a village in the forks of the Susquehanna, I cultivated the *yellow Siberian beet* in my garden. It produced at the rate of fifty tons to the acre. It was sowed the first week in May, in rows about 18 inches apart, and the seed dropped thick in the row. When the plants were grown so that the strong and the weak could be easily and certainly distinguished, they were thinned so as to stand about nine or ten inches apart in the row. I have forgotten what culture they required after this, but the farmer's good sense will teach him when he has the plants under his eyes.

They were dug up as soon as the lower leaves began to fall off, perhaps about the first week in October. It has been observed in France, that after this, they began to lose their saccharine matter. They were now piled up in conical heaps on the top of the ground, covered with rye straw, and then with a little earth. When hard frost came, more earth was thrown on and the whole was well covered with potatoe tops, straw, or something equivalent. They must not have much covering in October and November, lest they ferment or grow, for they may do either. As many as were wanted for winter use were carried to the cellars; those in the earth were kept for spring.

My servant washed them well; with a large sharp knife, he very quickly cut them horizontally in slices an inch thick; in this state he gave them to the cows, which eat them most greedily. They were not boiled or steamed. To do this is mere waste of time and fuel; you cannot render an easily digestible article more nourishing by any application of fire. It is possible they may be improved by salt and bran.

I do not know how much a cow ought to eat per day. Mine were fed three times every day, but the quantity was left to a faithful and intelligent servant; one thing, however, I do certainly know, that the cows always gave much more milk for being fed on sugar beets, and it was observed by all that the cream and butter were very rich, some persons thought them sweet.

I formerly had *carrots* cultivated for my cows, but my gardeners complained bitterly of the trouble of sowing them, and more bitterly still of the vexation they experienced in distinguishing them from weeds at their first appearance. They are long in vegetating and before they have time to peep out of the earth, the whole plat is covered thick with weeds. This great objection to the carrot does not pertain in any degree to the sugar beet.

I have recommended the *yellow Siberian* beet. I am not certain that it is to be preferred to the white sugar beet, but in my garden where both varieties were planted side by side, every advantage equal, the *yellow* grew the most vigorous, and owing to its very rich color, I could not but fancy that it would afford the most nourishment. I have tried too the *beta orltissima* or *mangel wertzal*, but it did not prove to be as productive as either the yellow or the white sugar. S. J.

Below we give the first annual report of the Directors of the New Castle County Silk Company, whose farm is located near the city of Wilmington, on the Concord turnpike. The active operations of this company, and the zeal and knowledge with which the directors have gone into preperations for the growth of the mulberry and the culture of silk, are all deserving of the highest praise.—Indeed the enterprise of this rich and productive county of Delaware—its fertile farms, its extensive meadows, and its great agricultural spirit of late, have all been exciting the admiration and emulation of the surrounding counties, and of sister states. This report of the Silk Company, adds another strong proof that our Delaware friends have gone to work in earnest, and understand well what they are about. We have been informed by an intelligent farmer, and a good judge, that this farm was bought by one of the directors a very *great bargain*—and was re-sold to the company at cost. He says of it that it is beautifully *located*, well hedged, and bears every indication of the best management.—Success attend their efforts.

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New Castle Co. Silk Company.

At a stated meeting of the Board of Directors of the New Castle County Silk Company, held on the 7th inst., a committee appointed for the purpose, produced the following report, which was read, approved, directed to be entered in the minutes, and published for the information of the stock holders.

Report of the proceedings of the Board of Directors of the New Castle County Silk Company to the present time.

Immediately on the election of the Board it took measures to promote the object of its

appointment. A farm, three miles from the city, containing about one hundred and fifty acres, was purchased at a low price, it was however, in a state of dilapidation and exhaustion. Committees from the Board visited it semi-weekly, in addition to the personal and regular direction of a competent special agent. A good farmer was obtained to occupy the house and work the land; six hundred pannels of new strong fence put up around it; cross lines of fences placed where necessary; and the plough put to work to prepare ground for the first planting of trees. This was done, and ten thousand plants set out, which grew well, and will afford food for from sixty thousand to one hundred thousand worms this season. The farm house has been repaired and made comfortable; a new roof and wing walls added to the barn, and other desirable alterations and improvements made within it. Thirteen hundred bushels of lime have been put on the ground, three hundred more contracted for, and a sufficient quantity of land ploughed and prepared to receive sixty-thousand plants the present season.

One thousand Morus Multicaulus, or Chinese mulberry trees, and twenty thousand cuttings, of two buds each, have been purchased, and are now at the farm ready to commit to the earth in the proper season, a few weeks hence. Besides the posts and rails for fencing, all of which were supplied from our own woods, the Board have had eight thousand posts and rails cut and rived out for sale, and about one hundred cords of wood cut and sold.

The Board hopes it will be apparent to its fellow stockholders, from the above brief statement of its operations, that it has not been unmindful of their interests. It trusts that another year will develope clearly, that its constituents may reasonably expect, not only a fair, but a large return for the funds they have placed in this concern. And while it regrets that so few have been found willing to subscribe for the promotion of this highly interesting branch of industry, it expresses its honest belief, that those who have adventured in it will be liberally compensated.

Signed by order of the Board,

MERRIT CANBY, Pres't.

SAMUEL WOLLASTON, Sec.

Wilmington, 4th Mo. 7th, 1838.

For the Farmers' Cabinet.

Rats.

Please inform your subscriber who is troubled with rats, to put some tar in and around the hole or entrance to his residence, so that he can't get in or out, without soiling his *best coat;* and my word for it, he will soon seek better quarters, for nothing is more dreaded by a *rat*, or any other *rogue* than a coat of tar.

B.

For the Farmers' Cabinet.

What shall we drink this harvest?

As the season of crops is approaching it is probable the question at the head of this article will be in the mouths of not a few of our farmers—and I trust there are a large proportion of them who will be prepared to respond to it, "we will not have any intoxicating liquor in our harvest fields nor on our farms."

Since the attention of intelligent and respectable persons has been generally awakened to the subject, and their observation turned to the consequences arising from the use of such liquors, a change no less wonderful, than happy in its results, has been wrought in many neighborhoods. In places where it was thought a few years ago, that the harvest could not be gathered, nor indeed the ordinary labors of the farm performed, without the aid of ardent spirits, and where, as was to be expected from such a course, most of the promising young men fell victims to the bottle, experience has now convinced the farmers that so far from being an auxiliary to labor, it is a direct obstacle, and that aside entirely from the dreadful moral evils which are avoided by its disuse, they can perform more labor, and with less fatigue, when they totally abstain from it. The most experienced and judicious physicians who have closely studied the effects of ardent spirits on the human body, find that while it affords for a short period, an artificial and unnatural stimulus to the system, this state of excitement is quickly succeeded by a lassitude, exhaustion and thirst, which renders the drinker almost unfit to labor, and impels him soon to drink again. And although each repeated draught may excite him for a few minutes, and seem to allay his appetite for liquor, it is only to prostrate him still more and to torment him with a burning and almost insatiable thirst.

Ardent spirits always create a feverish action in the system, which is increased by the heat of the weather—they debilitate the stomach, impede the process of healthy digestion, create obstructions in the liver, and other viscera, and thus weaken and destroy the appetite and give rise to dyspepsia, head-ache, apoplexy, &c. Persons who are much exposed to the sun in summer should never drink ardent spirits, as the practice exposes them to imminent danger of sudden death from apoplexy or stroke of the sun.

Any one who has noticed a regular dram drinker, must have observed how little he eats when working hard, compared with a man who has never disordered his stomach with the poisonous article. I have often been struck with this, when those who drink drams and those who do not are sitting at the same table. Nothing is more certain that to enable

a man to perform his share of labor, he must eat an adequate portion of wholesome food and digest it well. The healthy performance of these functions is like the supply of water to a grist mill—take the water away from the wheel, and the mill must stop; or diminish the quantity materially; and the grinding will go on slowly. So if a man's strength is not constantly kept up by the invigorating effect of a proper quantity of wholesome, well digested food, he cannot labor efficiently—he will soon feel tired, languid, and exhausted; and either give over work entirely, or go on very slowly. But the stomach of a dram drinker cannot keep up this regular supply—its functions are deranged—it is either disinclined for food, and the man has no appetite; or if he eats, his digestive powers are so weakened, that the food is not properly dissolved in the stomach, and distributed throughout the system. Hence it is that such men, though they may exhibit great strength for a short time, while excited by the liquor, soon fail when long continued and steady labor is required; and are easily outdone by men whose natural muscular powers are far less.

It has been fully proved by actual experiment that men who never drink any intoxicating liquor, endure the extremes of heat and cold, much better than even those who use the article in what is usually called a moderate way. I well remember a circumstance which occurred some years ago, when an attempt was made in extremely cold weather to discharge the cargo of a vessel which had been wrecked. As the men were necessarily exposed to be wet, and the severity of the cold threatened to freeze their limbs, ardent spirits were deemed necessary and freely allowed. Not a gang could be got to endure the exposure and fatigue more than a fewhours, when they abandoned the job. At length a very respectable man offered to contract for unlading the vessel in a short time, so short that the owners deemed it impracticable, considering the difficulties to be surmounted. He, however, persevered in his offer, and was accepted. When he put his gang of men on board, he provided at the same time for furnishing them at intervals of two or three hours with hot chocolate, and porriage alternately, with bread and butter, but strictly prohibited any intoxicating liquor, beer, cider, wine, &c. The dram drinking laborers laughed at his folly and sneered at his men, predicting that they would soon give out. But so far from this, they performed the work within the promised time, with comparatively little fatigue and no suffering—not a man gave out or was frost-bitten, though some of the dram drinkers were severely affected in this way.

This and other experiments fully prove that a sufficient supply of wholesome and nutritious food and drink furnish real support to the body to labor and that persons who use them only can endure much more than those who use intoxicating liquors. The same results, I am satisfied from my observation, will always be produced in the harvest field; and that true economy dictates the entire abandonment of those poisonous and destructive beverages.

But when we consider the moral evils flowing from the use of ardent spirits as a drink, the arguments against their practice are overwhelming, and indeed it is becoming quite disreputable to use or give them. From calculations which have been made it would seem that the number of persons who are slain by this mighty monster, greatly exceed the whole amount who perish by wars. If a pestilence sweeps over a country and consigns to the grave a multitude of our fellow beings, the mind is filled with awe and fear. But here is a dreadful moral pestilence stalking through our land and annually cutting down thousands of the once strong and promising members of society, yet so utterly insensible are many to the dangers which await them, that they even place themselves within reach of the infection, or tamper with the destroyer, as though they heeded not his pestiferious approach.

If we notice the wretched tenants of our prisons or our almshouses, we shall find scarcely one of the former whose course of degrading crime has not commenced in, or been nurtured by the habit of using strong drinks, while a large proportion of the latter will owe their wretchedness and poverty to the same demoralizing cause. How many blooming young men, once the pride and joy of their fond parents, and the light and hope of their declining years, have sunk, blighted and ruined, into an untimely grave under the fatal effects of dram drinking.

These all commenced their course in the *moderate* use of the article, and felt themselves secure from the danger of becoming drunkards, because they used it so sparingly. Perhaps some of them owed their introduction to the practice, to the example of those disconsolate parents who now weep in vain over their dishonored graves, and who commenced their course of ruin by carrying ardent spirits into the harvest field. No man suddenly becomes a drunkard—the morning dram—the occasional dose when wet and cold, or dry and hot, or when meeting a friend, or working at harvest, is the usual beginning. A friend of mine told me when far advanced in life, that in his early manhood he worked hard, and fell into the then popular error, that drams were necessary to sustain him. He soon found that the ordinary allowance did not afford him the

usual stimulus, and he increased the dose. A further increase became necessary, and again still further. He resolved to retrench, and had a cup made containing what he considered a small and safe measure. With this he began. The effort to reduce his allowance cost him a good deal of suffering, and in a few months he found his cup was made too small. The appetite for stimulus became so great, that one of two things was inevitable; he must either wholly give up dram drinking or become a drunkard. Shuddering at the dreadful alternity, he took his stand and after a hard struggle conquered the habit. But mark the consequences. His son, on whom he doated, following the example of his father in moderate drinking, had not the resolution to restrain his appetite or to abandon the practice, when he saw his danger, and sunk into all the degradation and vice of confirmed and irreclaimable drunkenness.

There is no nourishment whatever in ardent spirits—it is mere stimulus, the unvarying consequences of which, on a healthy subject, are deleterious, and sooner or later will produce disease.

But, say the consumers of the article, we cannot get through harvest without it—our hands will not work, and we should not be able to get in our crops. I will reply by giving you a statement of facts which came under my knowledge. A farmer settled many years ago, in a neighborhood where nearly every body used and handed out ardent spirits to their laborers. Conscious of the mischief attending the practice, he resolved not to do it, let the consequences be what they might. His neighbors all predicted that he could not get his work done, and that his harvests would rot in the fields. He had a man hired by the month, who worked well enough without liquor until harvest came on—then he demanded the usual allowance given by moderate drinkers, and on its being refused, stopped short in his mowing and hung up his scythe, declaring he would not mow another through, unless the required allowance of grog was given. The farmer quietly persued his work—mowed several throughs, and declared his determination not to give a drop of the article nor suffer it to come on his place, even if he lost his crops by it. When lunch time came, a bountiful supply of wholesome food and drink was carried into the field, and the dram drinker was invited to partake. He did so, and without saying a word more about the grog, took up his scythe, and worked through the whole season without a murmer. The summer was hot and the harvest large, but at the close of it the laborer voluntarily made the acknowledgement, that he had never seen a harvest got through so quietly and pleasantly—that he had thought it impossible to stand the labors of the season, without ardent spirits—but now he could say that he had never got through them with so little suffering and fatigue, nor felt himself so strong for work, and in such excellent health.

Now for the effect.—The force of long prevailing custom once broken through, the farmer found no difficulty in getting hands—the order, quiet and good feeling subsisting among his harvesters, while others were shouting, or in brawls and quarrels, arising from the excitement of liquor, induced his neighbors to try the experiment also, and all who did were so pleased with the improvement that there is now scarcely a farmer in the neighborhood who gives it. But the old practice had made many drunkards—the sons of many of the wealthy farmers, learning to love grog from the example of their parents, squandered their property and died off like rotten sheep; and the drunken laborers did not long survive them, while the happy change wrought by the steady example of this one man, has visibly improved the moral condition of the whole neighborhood, and a hardy, vigorous and inteiligent race of young men and laborers have grown up, under the system of total abstinence, who are useful and valuable members of society, and promise to transmit to their posterity, a good name and estate. We would say therefore to every farmer "Go and do likewise."

OBSERVER, Jr.

For the Farmers' Cabinet.

Steaming.

Mr. EDITOR:—Any how, that is a formidable apparatus described at page 241 of the Cabinet, for steaming food for cattle. Few persons of our class would be either willing or able to incur the expense of such an erection, much as every one acquainted with the value of steamed food must approve the practice.

I showed the print and read the description of it to my wife, who is an excellent judge as well as councellor, and is right about nine times out of ten; she exclaimed, "My! how different is all this to your cheap and very simple contrivance, than which nothing can answer better for the purpose; do tell the people about it." This I promised, and the result is, the present communication.

You must know then, that my wife lends me the use of her large copper, when she does not want it herself; into this I have fitted a tub, merely one half a port-wine pipe, with holes bored all over the bottom, about the size of my finger, which is, I assure you, not one of the smallest, for I have always been a hard working man, what, I suppose, your learned people would call a *practical man.* This tub rests upon a stout wooden hoop on the edge of the copper into which it drops an

inch and a half. The copper is filled with water to within an inch of the bottom of the tub, and when all is fixed, the tub is filled with the food to be steamed. It will contain six bushels of potatoes. I have a stout wooden cover, which is kept down by means of an upright piece of timber placed under the beam which is above the copper, and in the centre of the cover is a hole with a round iron plug made tapering, which being hung, by a string, over a small pulley, with a somewhat lighter weight tied to the other end of it, forms an admirable safety-valve during the time of steaming. I have two iron handles placed near the top of the tub, by which it is easily lifted out of the copper by a pulley, when the contents are sufficiently steamed; and while the bottom of it rests upon the rim of the copper, it is lifted up by another small iron handle placed near the bottom, on the opposite side, so that in an instant the steamed food is turned into a wheelbarrow placed to receive it; and it is the work of about a minute only, to replenish the water that has been evaporated, to refill the tub with the article to be steamed, and to fix the cover; by the time this work is completed, the steam is up and the work "progressing" cheeringly.

I ought to say I place a strip of coarse linen cloth, 5 or 6 times doubled, between the wooden hoop and the rim of the copper, as also around the edge of the tub under the cover, by which these joints are made steam tight without trouble or cost. I am, Mr. Editor, a constant reader of the Cabinet, and

An Old Farmer.

April 24th, 1838.

Don't forget to Marl.

It is apparent, from the numerous recent inquiries from farmers residing on the Peninsula, between the Delaware and Chesapeake bays that they are becoming aroused from their lethargy, and are manifesting a disposition to improve the means which are within their reach, to advance the best interests of agriculture in that once fertile, and interesting district of country. The original constitution of much of the soil, the recent discovery of inexhaustible beds of green sand and marl; and the facilities afforded to the transportation of the products of agriculture to Baltimore, Philadelphia, and New-York, the three best markets in our country, should stimulate the farmers to increased exertion in availing themselves of this union of unparalleled opportunities of advancing their interests, and of redeeming their character from the imputation hitherto cast upon them, of being "unkind to the soil." The first effort should be to coat the fields with a luxuriant growth of grass, for without this there can be no permanent continuance of good crops of grain. The system by which the present depressed state of culture has been produced, has been that of constantly endeavoring to cheat the soil out of a grain crop, without making any remuneration to it in the form of manure. This nature winked at for a series of years, with an occasional display of repugnance to *give something for nothing*, till at last she shewed symptoms of coming to a dead halt, and returned to her unworthy task masters, who seemed inclined to try to overturn and violate her laws, scarcely enough to pay the labor and expense of cultivation. This course of proceeding has been persevered in too long, and has been the cause of poverty, distress and degradation to numerous families; and has induced many to emigrate to sections of the country, where the natural advantages, and real sources of wealth were much more sparingly developed, than in the land of their birth-right. The first step towards doing better, not only in farming, but in every other department of life, is to discover that we have been doing wrong; acting on false principles; for wrong principles followed out, will sooner or later display bad results. We can't change the laws of nature, and any attempt to violate them will be fruitless and vain. Having traveled on in the footsteps of our fathers till we are landed in poverty; let us now take the back track and adopt a more rational system, conforming in all our works to the known laws of nature, and let us aid her in her efforts for our good, and not attempt to coax and force her, to give us something for nothing as the manner of some has been; but deal fairly, honestly and uprightly with old mother earth, and she will in her benignant spirit of kindness, bless us in basket and in store.

The green sand marl should be evenly spread on upland fields, of artificial grass in the fall, winter or spring, at the rate of from one hundred and twenty, to four or five hundred bushels to the acre; when this has been done nature will do the rest; and you may

be assured that a most luxuriant crop will reward the labor. When it is deemed expedient to plough up the grass sod thus marled, the marl will be found to have penetrated the soil several inches, and will be again brought to the surface at the same time that the thickly set and entangled roots of the grass will be turned under, to undergo decomposition and furnish food for the succeeding crop, say of Indian corn, which will be astonishingly improved by the application of marl, lime or shells applied in the same way on the surface of the grass. The increased production of grass as above stated, will produce a correspondent increase of stable manure, which should be applied to the winter grain crop, and when the soil is not very rich, it is better not to sow more than can be manured well, for it has been found by sad experience to be bestowing labor without a rational hope of reward; and is besides, branding a farmer, and exhibiting him to a whole neighborhood, as one that is "unkind to the soil," for no one should expect,

"To reap where he has not *sowed*,
Or gather where he has not *strawed*."

R.

—

The following communication we recommend to the attention of our readers; it is from an intelligent and practical farmer.

For the Farmers' Cabinet.

What will an acre of land produce?

In 1822, I enclosed an acre of land in the vicinity of Wilmington for the purpose of trying this experiment. I erected upon the ground a small house, and leased it to a gardener to work for one half the produce. The ground was enclosed in such a manner, as to leave an exact acre under cultivation. It was at first ploughed deep, the stones all carefully pitched off, then highly manured, and afterwards worked the first five years with the spade. I furnished the gardener with about forty dollars worth of manure annually, and sent a man, horse and cart, twice a week to draw the produce to market. Every means was used to raise the amount of sales to the highest point; seeds of the choicest kinds of vegetables were procured, forcing beds erected, and the produce ripened early, and sold in the market at a high price.

The average produce of my share for the first five years, was $174 20 cts. per annum, consequently, the whole amount produced by this acre of land was not less than $348 40 cts. per annum, besides the vegetables used in the gardener's family.

The gardener and his little family, consisting of three persons, had other perquisites, by which they obtained about $100 annually, in addition to their share of the garden; by which they were enabled to live in comfort, and could have indulged occasionally in some of the luxuries of life if they had chosen so to do. But like most other workers of the soil in this country, they wanted more land, and till it with a plough and a horse.

In order to gratify this disposition, I enclosed them another acre, and lent them a horse, plough, and occasionally a man to work it, and continued the same outlayings for manure as in the former case.

The consequence of this change was, that I received less per annum for the second five years than the first.

The family now became dissatisfied with their situation, nothing would do but more land; they complained of their labor being increased, and their income diminished; they had sometimes to hire and they had no money to pay the laborer; they had many other difficulties to encounter, all of which were ascribed to the smallness of their farm. I was now as much dissatisfied as they were, for we could not agree about the cause of our unsuccessful efforts; but as no other way opened at the time, I enclosed about two acres more for a third five years experiment, which terminated in my receiving less income than in the second five years, and not much over one half the amount of the first five. So much for increasing the size of farms without being "kind to the soil."

The result of these experiments correspond with all the known facts that have come under my observation for the last thirty years upon the subject of the profits of capital expended in agricultural pursuits.

I at first adopted the opinion that the secret of gathering money out of the soil lay in small farms, but extended observation of facts and mature deliberation has changed this conclusion. I now believe the quantity of land has nothing to do with the profits of the capital expended; that it altogether depends upon a judicious selection of soil, the facilities of obtaining manure, and the proper application of it as food for plants, and most of all upon the quantity of the best and most nourishing kinds of manure; upon this mainly depends the profits of capital expended for agricultural purposes.

I found $5000 expended upon 100 acres of poor land in the neigborhood of Wilmington, would not produce after paying all expenses more than 5 per cent. upon the capital, but by doubling the amount in expenses for manure and making the sum laid out $10,000 it

would more easily nett $1,200 per annum; that is, the profits of the capital laid out in land produced an interest of 5 per cent. per annum, and the capital laid out in manure produced 20 per cent.

The simple fact of the vast difference between the profits of capital expended in land, and in the improvements explains the diversity of opinion that exists upon the profits of agriculture, and a knowledge of this fact is in my opinion of incalculable advantage to the community. If the above hasty sketch should elicit the spirit of inquiry, and put into operation some practical experiments among the readers of the Cabinet, it will amply satisfy a SUBSCRIBER.

Wilmington, 4mo. 28, 1838.

For the Farmers' Cabinet.

More fruits of Industry and Intelligence.

Verily, Industry hath its Reward.

The cultivation of the soil, in our country, is yet in its infancy, but it is growing into manhood with a rapidity that is truly surprising, and the publication and extensive circulation of well edited papers devoted to agriculture, horticulture, and rural economy, are producing an influence throughout the community which, tends greatly to promote the best and most durable interests of this republic. The effort to ascertain the greatest possible productive powers of the soil, can yet scarcely be said to have been made; still there have been some approximations to it in the neighborhoods of some of our large cities, where manure can easily be obtained and the productions of the soil are readily disposed of at fair prices. A very worthy and industrious individual, who resides within a few miles of Philadelphia, and who still carries on his business of horticulturist and farmer with much zeal and energy, married upwards of forty years ago, and took on a lease for seven years about thirty acres of heavy, flat, clayey land, with the necessary buildings. The soil was thin, and his capital consisted principally in the joint industry of himself and his companion; she was much discouraged at their prospects on settling on their new location, but they were both of the short-backed, industrious, economical stock, of German origin, and set to with cheerfulness and vigor; their neighbors were of the same class in life, and generally tenants of from 20 to 40 acres under city landlords. Their plan was to raise as many vegetables and as much fruit as they could dispose of advantageously in the market, and appropriate the remainder of the land to the cultivation of the various kinds of grain and grass to supply their domestic wants, and if there was any overplus, to dispose of it in the market to add to the general fund.

After proceeding on for some time in this way, he ascertained, that by great industry, economy, and close attention to business, he, in common with his thrifty neighbors, could, each, after paying the rent, save about two hundred dollars per annum. His neighbors, being of the penny-saving class of society, put their monies out at interest, at six per cent. per annum; but my friend George, who was a little more penetrating into what he thought would promote his best interests, informed the writer of this, that he *bought manure* with *his* money, and it produced him SIXTY per cent. In this way he proceeded till his lease terminated, when he purchased the place and became a landed proprietor. He still prosecuted his business with energy, annually improving the soil by the copious application of additional doses of manure, principally purchased and hauled from the city; and still his annual receipts continued to grow, as he encouraged the soil to grow more and more produce, by continually supplying it with plenty of nutriment of a suitable kind. As his means increased, his family increased, for his wife was a fruitful vine in every sense of the word. They had ten children, whom they brought up and educated well, and those of them with whom I am acquainted, do honor to their parents, being real chips of the old block, finely exhibiting the great advantages of a good rearing in habits of industry and economy, which might truly be envied by many of our respectable citizens, whose sons and daughters have been taught in a very different school. A number of the adjacent little farms were from time to time purchased by my friend, (a small portion of whose history I am writing out for you, without his knowledge or consent, though the materials I obtained from himself, at different times,) all of which were duly paid for, and he is now the owner of a large tract of land, though it is subdivided into small farms or vegetable lots. Several years ago, he removed to an adjacent farm, and put one of his sons on his first purchase of thirty acres, under a contract that he should first pay for all the hired labor, and manure bought for the farm, out of the gross receipts for the produce, and then divide the balance into two equal parts and pay over to his father one half, and keep the other moiety himself; and the amount thus paid over annually, has been, for many years past, thirteen hundred dollars; of course the nett proceeds of these thirty acres annually is twenty-six hundred dollars, after supporting the family of the son in eatables and paying for the hired help and the manure applied to the land. This statement may appear to some as too extraordinary to be true, but there is no fiction or exaggeration about the concern whatever, and in fact the half has

not yet been told, as the reader would at once perceive, if he should visit the spot, particularly in strawberry time, which will soon arrive after this communication emanates from the press. He will there see as many strawberries as will sell for $600; cabbages, lima-beans, early potatoes, asparagus and tomatoes growing close to, and resting on the fences, and in fact every other kind of fruit and vegetable that is sold in the market, of the earliest growth and in the highest state of perfection. It is not easy to get a dinner at one of our best hotels, or on board any ofour large steamboats, without paying tribute to my worthy friend, the gardener, who richly deserves all he gets, as a reward for his intelligence, his indefatigable industry, and his sound economy. But to conclude, he is now worth enough, after the toil of near fifty years, to purchase five of the best ships belonging to this port, all obtained without the taint of speculation of any kind, but by honest industry directed by sound intelligence; and all this has proceeded,primarily from he and his wife, both pulling at the same end of the rope, and by his being "kind to the soil." WEST.

Philada., April, 1838.

For the Farmers' Cabinet.

Ringbone.

Methinks it must excite involuntary feelings of pride, in the breast of every Chester countyan, to observe how many of the writers in the Cabinet, hail from this "home of agriculture." But those feelings may have been somewhat alloyed on finding that there is a little too much *lunacy* among us.

I did not remember that horses, were among the strange animals, which the celebrated John Herschell, recently discovered in the moon, by means of his newly invented oxy-hydrogen telescope. Nor did I know, till the reception of a late number of the Cabinet, that any intelligence of the veterinary art in that distant luminary, had yet arrived at our earth. Even yet I am left to conjecture how or by whom we have received the method of curing ring-bone in the moon. Has some *lunarian* just returned from planting cucumbers or potatoes—or gathering his crop—bringing the interesting intelligence with him? For you know that the moon is a sort of common *truck-patch* for every lunarian.

The remedy recommended by a German for the cure of ring-bone (Cabinet, vol. ii. p. 181) is rational enough when divested of its lunacy. It would be much better that remedies should be recommended on principle and according to their intrinsic value—and not by the imaginary influences of the moon or of aster-ology. The time has come when astrology should be discarded. Men and other animals are not now as formerly born under the benign or malign influence of a governing planet, nor are the less important events of their future lives under the relentless government of a ruling aster or star.

In this generation of anti's, I fear that many of our anti-lunarians would rather allow their poor horses to "limp on to the end of their journey" than undertake an equestrian journey to the moon for their recovery. It is for the especial accommodation of these anti's *at home* that the following remarks are penned.

Every one is familiar with the general appearance and seat of ringbone. Its more precise character may not be so well understood. The foot of the horse consists of three bones which lie below the great pastern or fetlock joint. The first or pastern bone lies between the great and little pastern joints—the second or coronet bone lies next and is articulated with the last or coffin bone just within the upper edge of the hoof. This last bone lies entirely within the hoof, and in shape resembles the foot externally. The middle of these three, the coronet bone, appears to be the primary seat of ringbone. In cases of long continuance it may extend to the pastern and coffin bones. It consists of a bony tumor growing from the surface of the bone and rendering the motions of the joints difficult and painful. It may probably be produced either by sprains and bruises, or by hereditary predisposition.

The remedies which have proved most successful in the cure of ringbone are such as produce severe irritation on and copious discharges from the surface of the tumor. Among these are all powerful stimulants as turpentine, oil of orgiganum, oil of spike, all the blistering and caustic applications—and even the red hot iron.

In the incipient stages of the disease the more mild remedies will often succeed; but when it has acquired inveteracy from duration it will sometimes resist the most powerful means, unless perseveringly employed for a length of time.

The *aqua fortis*, which a German recommends is of a caustic nature—and will act more or less severe according to the manner of its employment. Applied so liberally as he recommends and aided by the heat of the *rye cake* it would probably be unnecessarily severe for recent cases. When milder means have failed, and not till then, it should have a fair trial. But the owner may choose his own time and place to apply the remedy, for I will venture the assertion that aqua fortis will prove equally irritating, equally caustic, when applied to the skin of the horse at any other time as it would do "on the first day of last quarter of the moon." And moreover, it will prove quite as efficacious in curing

ringbone in Chester county as in the moon. I would also suggest that any other warm poultice may be substituted for "a cake of chapped rye" without detriment to the cure.

If these remarks shall enable any of my anti friends to cure their own horses at home and save them a journey to "the far-famed land of lunacy," I shall no doubt receive the reward due to an ANTI-LUNARIAN.

Chester County 4th mo. 20th, 1838.

For the Farmers' Cabinet.

Keep your domestic animals clean.

By cleanliness we carry out a law of nature, and thereby essentially promote our best interests.

In a state of nature, all animals keep themselves clean; instinct prompts them to do so, for the preservation of their health, and the promotion of comfortable feelings. In a domesticated state, it becomes the interest and duty of those who have charge of them, to keep them neat and clean by artificial means, or to furnish them with the liberty requisite to enable them to indulge their natural instincts so far as to carry out that great law of nature, which prompts them to resort to such simple means of promoting cleanliness and health, as are indispensible to their own well being, and the only certain means of rendering them objects of true interest and profit to their owners.

Poultry should always have a place of resort under a dry shed, well supplied with dry dirt, spent ashes or effete lime in which to rub and dust themselves. This is the process to which they resort to comb themselves, and to get rid of lice or vermin; and it at the same time opens the pores of the skin, and permits the confined, peccant fluids to make their escape from their bodies, which essentially promotes their thrift and causes them to lay many more eggs than they otherwise would. To keep poultry perfectly *clean*, *quiet*, and *retired*, increases their profit to the owner more than four fold. They should never on any occasion be suffered to feed, lay, roost, or even make occasional visits to the stalls or mangers of horses or cattle, hog pens, or sheep houses; the excrement and lice they leave where they visit or frequent are injurious and poisonous in a high degree to all other domestic animals, and do more towards preventing their owner from realizing his anticipated profits, from their generous keep, than any other cause whatever. R.

To the Editor of the Farmers' Cabinet.

DIRECTION FOR PLANTING PEACH TREES.

Sir,—If our Jersey friends, at the time of planting their peach trees, would excavate the earth to a good depth into the sub-soil, and cover the bottom with six or eight inches of brick and morter rubbish, and then mix marl with the surface mould into which to plant the tree, treading it firmly about the roots, there would be no further complaint of the worm, which is the consequence of the disease, not the cause. The sub-soil of ferruginous and acidulous or lime and calcareous earth act as corrector of these evils. An Old Farmer.

For the Farmers' Cabinet.

Procrastination.

"Procrastination is the thief of time."

It is an old and true saying that a thing begun, is half done—but to break the ice is the difficulty—when that is accomplished, most people can go a-head easily and pleasantly. I have a neighbor who is good at *planning*, none better; but it requires more energy of character, than he can command at pleasure, to enter promptly on the execution of his designs; he hesitates, he tries to invent some plausible excuse for "putting off till to-morrow what ought to be done to-day"; not being fully satisfied in his mind of the truth of the saying, that those who are good at making excuses are seldom good for much else. He has a good farm within a reasonable distance of market, but he is not yet out of debt, and I fear, that, unless he musters up a little more courage, and exhibits more promptitude of action, he never will be. He lacks energy, he puts off, he procrastinates, and of course he seldom has time to do many essential things, because he is always resolving to do a great many things, that never get done properly. For example, he determined, forty years ago, to plant an orchard, for he liked good fruit, and thought it might be profitable; this wise resolution has been fixed in his mind for execution about twice a year nearly ever since; but in the spring his other work presses upon him and he thinks the autumn the best time for planting trees, as they get fixed firmly in the ground before the sap begins to run, which he now conceives to be very important to their future growth and vigor: when autumn arrives, there is the potatoes to get in before frost, the corn to husk, and numerous other matters to be attended to before winter sets in; and then he conceives the spring would be the best time to plant, for neighbor B. has informed him that the hard frosts of winter might injure the roots of recently transplanted trees. Moreover, he hopes he will have more time for the operation before the ground is in order for spring ploughing; so he still resolves to have a fine orchard of fruit trees, and six months or a year won't make much difference in the time when it shall come to perfection. In this way, resolving, and re-resolving, he has moved along ever since I was a boy, and he has no orchard yet; in fact he is now worse off than he was formerly, for the

old trees that were planted by his industrious and thrifty predecessor, and which furnished a pretty good supply of fruit, for some years, by the ravages of insects, and the effects of old age, have ceased to exist, and left no representatives to supply their places. He now begins to think he is too far advanced in the vale of years to propagate trees, the fruit of which he shall not, in all human probability, live to partake of: so that, although I am many years the junior of my neighbor, there appears but a very dull prospect of my seeing an orchard on the adjoining farm during my life time. This, Mr. Cabinet, is only a sample of the effects of the operation of procrastination in my good neighbor's concerns—for he has a hedge occupying the best strip of land on his farm, that has been cut down, and the ground ploughed up and made into a compost-bed *in imagination* twenty times within that number of years, and yet it still stands, casting its shade further and further each succeeding year. He has also a goodly quantity of stones and rocks scattered through several of his inclosures, which he has often *dreamed* were hauled off, and deposited nicely in the bottom of a large gully, that intersects one of his fields, and which might be filled up in three years, so that it could be brought into fine grass, but there it still remains in all its original ugliness, gaping at every passer-by and seeming almost to articulate

Oh! the detestable vice of Procrastination.

O.

P. S. I was near forgetting to remind you of the saying, that, "as the old cock crows the young ones learn," for there are several young cocks on my neighbor's farm, who, I think, crow a little *louder* than the old procrastinating rooster.

For the Farmers' Cabinet.

Rats.

"A pennyworth of prevention is worth a pound of cure."

A writer in your last number is desirous of being informed of a remedy for getting rid of rats; and having some knowledge of those animals and of their depredating propensities, I will trouble you with a few lines on the subject.

In the first place when you find yourself annoyed with any malady or special inconvenience, inquire particularly into the various causes which have given rise to it; and when that discovery has been made, go at once to work on the *back track*,and remove the cause as quickly as possible, and in ninety-nine cases out of a hundred the complaint will vanish when the cause has been removed from which it originated.

In the second place, I take it for granted that every farmer who is considerably annoyed by rats, has provided for them some commodious and comfortable harbor, wherein they can breed and rear their young with perfect safety and comfort; for a rat is a very sensible and knowing animal, and never fixes his quarters intentionally and aforethought in a situation for a permanent residence where his peace, safety or repose, is likely to be invaded by his enemies. Of course, when he is in search of quarters, he always gives a preference to the barn, stables, barracks, stacks, or corn cribs of the most careless and dirty farmer he can find, because by such he is least likely to be disturbed.

A stack or barrack so fixed that a cat or dog can't get under it, furnishes especial good accommodations; and so does a hog pen with the floor fixed just so far from the ground as to make the ingress and egress convenient, and not to admit larger intruders which might endanger his safety. Various other suitable and convenient places for breeding and safely harboring rats might be pointed out, but I presume it will not be necessary, as every farmer of ordinary comprehension will be able to point out such conveniences as may be best adapted to the purpose.

It has been truly said that if you have a pigeon-house you will have pigeons, so if you have suitable conveniences and accommodations for rats, you will have rats without doubt, for they are always on the look out for undisturbed quarters, and the best plan that I know of to avoid troublesome tenants, is to remove and destroy all accommodation for them. Let them see that if they remain with you they must continue in a state of perpetual discomfort, and my word for it, they will soon begin to think seriously of emigrating to some place of repose. I know a farmer in Montgomery county, who has a large farm and three barns on it, and where it would be as strange a sight to see a rat, as it would be to see a snake or a toad in Ireland. The only remedy against their invasions is constant and unremitted care and cleanliness. Let no harbor for them remain about your premises in any shape whatever; keep your stacks and barracks so far from the ground that dogs and cats can pass under them; keep a terrier dog of high blood and good descent, and teach your cats to stay at the barn instead of living in the kitchen. If you should unfortunately have a stock of rats on hand at this present time, begin their persecution at once with ferrets and terriers, and don't give out while one remains to propagate from, and then resolve to keep your premises in such order that a rat would be afraid to show his face about them, for

What profiteth it the husbandman, to gather the grain into the garner, if it be eaten by rats.

WHITPAIN.

April 26, 1838.

To the Editor of the Farmers' Cabinet.

SUGAR BEET.

Sir—How is it that the successful manufacture of sugar from the beet still remains a problem! When Mr. Pedder was in France, two years ago, we were led to believe that on his return the experiment would be made on a scale which would put the question to rest; but, on the 3d of September, 1837, more than a year afterwards, we find Mons. Le Clerc, who had studied the beet sugar making *in France*, conducting "an experiment at Ludlow's station near Cincinnati, on a *small quantity of juice*, only a *glass full*," and expressing himself overjoyed with the result, for he had *discovered* that the manufacture of beet sugar on a large scale is every way possible!—and this *he discovered* from an experiment upon a glassful of juice!

In your number for September last, p. 46, I find an account from Mr. Child, who writes from France, what we would almost suppose must have been taken from the published report of the Beet Sugar Society of Philadelphia, had he not said, "I do not find the profit of raising the beet so high as Mr. Pedder did," but immediately adds, "can you wonder that land has risen from 50 to 150 per ct. in the districts of the sugar manufactories!" Since that time we have been inundated with accounts of partial success, and promises of great results from small experiments; but yet, so far as I can learn, the main question is still undecided, and I prophesy it will remain so until it is taken up by those who will enter upon it with the single aim of *preparing sugar from the beet*, and not with the view of making it subservient to some land speculation, or other consideration quite foreign to the purpose—then, with a capital sufficient to carry out the undertaking, success is certain. It has been supposed, that the difference between the cost of labor in this country and France, would operate as an interdiction to the manufacture of beet sugar, but I am of quite a contrary opinion. The growing of the crop is not more expensive than the raising of a crop of corn, this has been ascertained to a certainty; the difference in the amount of wages must, therefore, apply to the fabrication of the sugar only, and so far from this being in favor of France, I believe it is quite otherwise. In France, where the rate of wages is so low, few think of applying machinery to its full extent, in the various operations of the sugar house; almost every thing is done by hand, but the labor of a dozen men and women is, oftentimes, not equal to the single motion of a crank in a steam engine; and in the report above mentioned, I remember the observation, in proportion to the low rate of wages, so is the labor performed; and there too we are told, a woman with boards fixed to her feet was employed in treading the surface to save the expense of rolling! I believe it is Edgeworth who says it is customary in Ireland to make *gates* of *boys*, and when cattle break into the corn fields, the employer complains that the poor *gates* do not do their duty! If I am not mistaken, I have an establishment in my eye where six times the amount of labor is performed, at about a third of the expense incurred in countries where a man might be had for 15 cents a day's wages! and where the very circumstance of this low rate of wages, operates as the greatest injury to society; and who will erect expensive machinery, when the *human machine* can be purchased at so cheap a rate, ineffective as it will always be found.

It is an excellent observation, that the well-being of a country can always be estimated by the value of daily labor, and that this is by no means in favor of low wages. Although it has been proved, that no root crop can be raised for the use of cattle and sheep, that can at all be compared with the sugar beet, I am not willing that our efforts should stop here. All writers agree, that nearly as much stock can be kept on the refuse of the sugar-house and barn-yard, as upon the crop of beets uncrushed, and if I am not greatly mistaken, the fabrication of sugar might be conducted in this country, by the aid of improved machinery, at as cheap a rate as in France, by manual labor paid for at a rate, which scarcely affords the means of a bare subsistence. Thus far is certain, sugar from beets has long been made in France, equal, in all respects, to that from the cane, without difficulty and to great profit. It is admitted by all hands, that the beets can be grown in this country larger and more rich in saccharine than in France; the only question seems to be, on the power of crystalization in this country; now if those who have found a difficulty with their "glassful," "gill," or "half pint" of juice in this part of the process, would experiment upon the same quantity of cane juice, they would find the same cause of complaint; but if they will substitute for this "glassful" two or three thousand gallons, they would also find a very simple cure.

I have been re-perusing Mons. Le Clerc's letter of page 55 of the Cabinet, vol. II. It is a curious production—here is a man, who has studied beet sugar making in France, operating upon a glassful of juice, and expressing himself overjoyed with the discovery, *which he has made!* that the manufacture of beet sugar on a large scale is *every way possible*—with such very small means of judging, I should hardly have expected him to take upon himself to doubt whether this industry can be profitably conducted in this country by

others; and would hardly look for much information from the perusal of his manual of beet sugar making; and how he can have some "good additions to make to it," founded upon his experiments with a *glassful of juice*, I am curious to know—his means of information *in France* must have been slender indeed!

One thing is sure, whenever the business is taken up by competent persons in a proper manner, success is as certain as that the sun will rise to-morrow.

I am your subscriber and constant reader,

J. W. B.

Bucks Co. April 20, 1838.

Pruning Fruit Trees.

This operation is directed to be performed by a writer in the Horticultural Register, *in the winter*. The common practice is to prune *in the spring*. Both we conceive to be wrong. It is unnecessary again here to repeat our reasons, for pruning *at mid-summer*. We will only add, that our opinion in this matter is fortified by the philosophy and practice of the late Rev. Dr. Dwight, and by four year's observation and practice in our own grounds. We prune in the last of June and first part of July. We earnestly recommend a *trial* of the practice.—*Cultivator*.

The objects of pruning are at least three fold. We trim shade trees to produce symmetry of form. We trim forest trees to produce a handsome and valuable bole, or stem, for timber. And we prune fruit trees for the double purpose of giving them a good shape, and of inducing them to bear well. To the pomologist that shape is most handsome, in a fruit tree, which indicates the best bearing qualities. It is remarked, particularly of the apple, that upright shoots produce less abundantly than those which grow horizontal, or deviate materially from an upright form.—Hence, in forming the head of a young apple tree, it is customary to take out the upright shoot, when the tree has attained a proper height, say seven to nine feet, and to leave three or four laterals or limbs to form the head. And as pruning does not increase the quantity of wood, but has a different tendency and effect, by lessening the leaves, which are the organs of nutrition, the upright shoot should not be taken out until the laterals have acquired considerable wood and foliage. In pruning fruit trees, all limbs which are likely to interfere with each other, should be taken out while they are small. The head of the tree should be kept open, so as to admit light and air, essential to the maturity of the fruit. In pruning all trees in the nursery, the limbs should be left always upon one-third of the stem, that is, only two-thirds of the stem should be denuded of limbs.

For the Farmers' Cabinet.

STIR THE EARTH DEEP.

Deep ploughing has been much recommended and but little practised; the reasons for which I suppose are, that proper implements for that purpose are rarely possessed by our farmers, and few choose to incur much expense to supply themselves with suitable utensils when they are not fully convinced that a profit will arise from their use. Having met with the following simple and apparently efficient plough coulter, as it is called, in the Farmer's Register, with a recommendation subjoined, from one of the most intelligent farmers in Virginia, I beg of you to have a wood cut made of it, and publish the description and use of it in your very useful and interesting little work the Farmers' Cabinet. I have no doubt but many of our enterprising farmers, will at once see the importance of bringing it into use, on our stiff soils, to loosen up the earth for three or four inches deeper than our common ploughs go, without bringing the earth from below on to, or mixing it with the surface soil. One horse attached to it, and walking in the furrow after the common ploughman, will effect all that is required. This process of stirring the earth to a greater depth than is usual in common ploughing will, in time of much wet, suffer the superabundant moisture to sink away, and not injure the plants by diluting their food too much; and in time of drought the fibres of the roots will penetrate to a greater depth in search of their appropriate nutriment. This method of loosening the earth to a greater depth than is usual, is like all those good old rules that work equally well both ways; *wet* or *dry*.

"Plough deep while sluggards sleep,
And you shall have corn, to sell and to keep." E.

Plan and description of an excellent Coulter.

A very brief description will suffice for the coulter, the original contriver of which I do not know; for I met with it about two years ago, on board the Rappahannock steam boat, in possession of a gentleman who could give me no other account of it, than that he procured it from the late Mr George Banks of Stafford county. I was so struck with its manifest superiority to any coulter I had seen before, that I immediately made a sketch of it; had one made as soon as I could; and have been using them ever since, with a decided preference to all others. None, of which I have any knowledge, are superior to it, in any one respect, while this is superior to them all in two important particulars; you may wear out both points, by reversing them before you

send it to the blacksmith; and the point which works behind, causes the coulter to run much more steadily. A single horse will draw it easily in most of our lands, after they have been well broken up with the plough; while four, even of our miserable half-starved Virginia oxen, will break or tear up roots by it, as thick as a man's wrist with no more "geeing" and "hawing" than they require to drag a load of wood to their master's door, or to any other coulter, that I have ever seen tried.

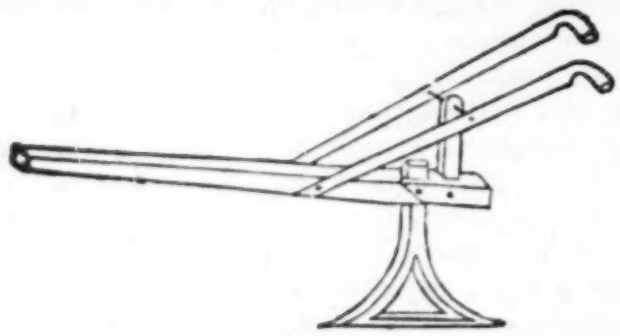

Fig. 53.

The lower part of the coulter is made out of inch-square iron, flattened and well steeled at the points, and is twenty-two inches long.

The upright part is of bar-iron two and a half or three inches wide, by a half inch or five-eighths thick, and should be seventeen or eighteen inches high from top to bottom, and left square both on the front and hinder edge.

A half inch bolt will suffice to fasten it in the mortice through the beam which should be at least four by three inches at that part. A band of round, half inch iron, should also be fixed on that part of the beam, so as to rest against the front edge of the coulter above and its back edge below, which will keep it firmly fixed in the mortice.

If this drawing, with my description of it should contribute only half as much as I hope it will, to the benefit of our agricultural brethren, it will be deemed an ample reward, to the end of life, by their friend and yours,

James M. Garnett.

Use of Lime.

Lockhart, in his life of Sir Walter Scott, relates the following anecdote.

'There see'—he continued, 'that farm there, at the foot of the hill, is occupied by a respectable enough tenant of mine; I told him I had a great desire for him to try the effects of lime on his land. He said he doubted its success, and could not venture to risk so much money as it would cost. Well, said I, fair enough; but as I wish to have the experiment tried, you shall have the lime for the mere carting; you may send to the place where it is to be bought, and at the term day you shall strike off the whole value of the lime from the rent due to me. When the day came, my friend the farmer came with his whole rent, which he laid down on the table before me, without deduction. "How's this, my man; you are to deduct for the lime, you know." "Why, Sir Walter," he replied, "my conscience will not let me impose upon you so far—the lime you recommended me to try, and which, but for your suggestion I never would have tried, has produced more than would have purchased the lime half a dozen times over, and I cannot think of making a deduction."

Elements of Practical Agriculture.

DRAINING.—Continued.

Before beginning to drain a field or tract of ground, it is frequently well to ascertain, by examination, the nature of the substances to be digged through.

At the upper part where the wet tract to be drained appears, or between the wet and the dry, let a few pits be digged. The place of each pit is to be marked out nearly in the direction of the proposed line of drain, six feet long by three in width, in which space one man, and if required, two, can work. Let the earth be thrown out to the lower side, and to such a distance from the edge of the pit as not to press upon and break down the sides. Let these pits be made to the depth of five or six feet, or more if necessary, so that we may reach, if possible, the porous bed in which the water is contained. Should we find no water, then let us apply a boring-rod, in order to ascertain at what depth the porous substance lies in which the water is contained.

Sometimes water will not be found until we come to a great depth. It may be so deep that we cannot reach it by any drain, or even by boring with the auger. In this case a previous examination saves us the labor of making the drain unnecessarily deep. Sometimes we shall proceed to a considerable depth without finding any appearance of water, when, all at once, by breaking through some thin stratum, we shall reach it. The water is frequently seen in this case, to boil up like a fountain, and this affords the assurance that we shall succeed in our object.

This species of preparatory examination by means of pits, is therefore, in many cases useful. It affords the means of judging of the proper depth and dimensions of which the drain shall be formed; it prevents the committing of errors in the laying out of the lines of drains; and it enables the drainer to enter into contracts with his workmen with precision.

When we have thus, by sinking pits in various parts of our intended lines, obtained an idea of the nature of the ground, of the substances to be digged through, and of the depth of the water, we mark our lines of drains upon the ground.

This may be done by pins, or by a plough drawing a furrow along the intended line.

It is at this time very convenient to make

a hand-sketch of the piece of ground to be drained, marking each line as it is laid off in the field, and noting the depth and direction in which the water is to run.

The lines being marked off in the manner described, these are to form the upper edges of the drains.

The width of the drain at the top depends upon its depth, it being usual, except in the case of very hard and tenacious substances, to make it slope from the top to the bottom.—Thus, if it be six feet deep, and from 18 in. to 2 feet wide at bottom, it may be 2½ feet wide at top.

The workman, in forming the trench, works up to the higher ground, and never from the higher ground to the lower. The instruments which he uses in the operation are—the common spade, a shovel for throwing out loose substances, a pick or mattock, for raising stones and breaking the earth when hard, and the foot-pick.

The materials to be used for filling the drain may be stones, tiles, or other hard and durable substances. When stones are to be employed, if they are inconveniently large, they may be broken to the weight of three or four pounds. They may be laid down for use, before the cutting of the drain is begun, along the upper line of the drain, the earth being thrown by the workmen to the lower side; or else they may be brought forward while the work is going on, and thrown from the cart into the drain.

In the larger class of drains it is regarded as beneficial, and even necessary, to form a conduit at the bottom. This is done by building a little wall roughly on each side at the bottom, about six inches in height, and so as to leave an aperture or conduit of about six inches in width. The workman then covers it with such flat stones as he can procure, filling up also the interstices of these covers with smaller stones, so as to defend the conduit from earth and other substances that might fall into it. When this is done, the remaining stones are thrown in promiscuously to the height of 18 inches or two feet above the cover. The stones are then to be made level at the top, and either covered with the sod which, on breaking the ground of the drain, had been laid aside for that purpose, or with a covering of straw, heath, or the like. This covering is to prevent the loose earth from falling amongst the stones.

When these operations are completed, the earth which had been thrown out of the trench is shovelled upon the stones until it be above the level of the surface. The purpose of raising it higher than the surface is to provide for the subsidence of the loose earth, which is generally found to be rendered more compact, and to occupy a smaller space than it did in its original state. When a portion of the earth is shovelled in, it is an economy of labor to employ a common plough for filling in the remainder.

A drain thus formed will appear on a transverse section, as in Fig. 54, and after the subsidence of the earth as in Fig. 55. Where the soil is very soft, it is of benefit to pave the lower part of the drain with stones or slates. In the whole operation of forming the trench and conduit, great care is necessary in seeing that all the parts of the work are executed well.

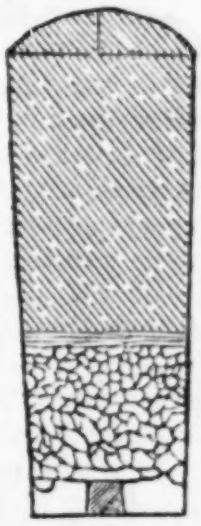

Fig. 54.

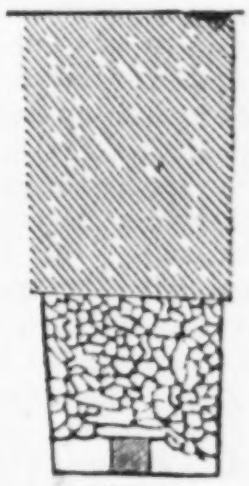

Fig. 55.

The stones used for this species of drain may be sandstone, or any of the harder stones that can be obtained. But, in many cases, stones are not to be obtained, in which case tiles may be substituted.

Fig. 56.

The tiles, which are made with an arch as in the annexed figure, 56 may be formed of separate pieces of about fourteen inches in length. Flat soles are made of the same material, on which the arched tiles are to rest.

The method of forming the drain when tiles are the material employed, may be somewhat different from that adopted when stones are used.

The drain is carried down as narrow as a man can work, and at the bottom an excavation is made by means of a narrow-mouthed spade, to fit the dimensions of the tile, which is then placed upon its stand or sole. Above this should be laid some loose materials, as clean gravel or sand, for allowing the filtration of the water. Even brushwood, and such materials, may

Fig. 57.

be used; for though they are not of great durability, they serve the purpose, even after they have decayed, of rendering the earth more open and pervious to water.

Drains formed in this manner, whether the material employed be stone or tile, will be found efficient when they are laid out in the proper direction, and when the pervious substances are reached in which the water is contained.

But it is often impracticable to reach these substances with a drain of common depth.—In this case, apertures may be formed at the bottom of the drain, by boring or sinking down at the proper distances, until the pervious beds in which the water is contained are reached. By this means the water will be allowed to flow up from below into the cavity of the drain, and so will be carried away.

The application of this principle had been familiar from the remotest times in the sinking of wells. But it was not till after the middle of the last century that the same principle was applied to the draining of land.—This was done by Mr. Elkington of Warwickshire, who employed the auger and the boring-rod for the purpose of reaching the channels and reservoirs below the surface, when an ordinary drain could not reach them.

The auger employed for this purpose is similar to a carpenter's wimble. It may be from four to five inches in diameter. Square iron rods are made to be screwed into one another, so that the length of the line of rods may be increased in proportion as the auger penetrates the ground. In the annexed fig., A is the auger, B one of the rods, C a key for turning it round and working it, D another key for holding the rods when they are to be unscrewed by means of the key C.

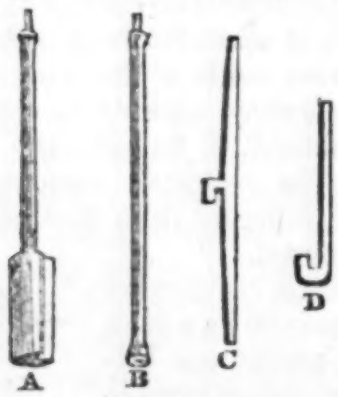

Fig. 53.

This instrument may be sometimes found useful when the channels and reservoirs of water can be reached in this manner. The apertures are formed by the auger in the bottom of the drain. When the water is reached, it will spring up into the drain, in the same manner as water in the bottom of a well. It is not necessary to employ any artificial means for keeping the apertures open, as the flow of the water will suffice to maintain for itself a passage.

For the Farmers' Cabinet.

Food for Chickens.

The thrifty housewife getteth much gain by chickens.

As this is the season when our good housewives are rearing broods of chickens, and turkeys, to have them in readiness for market next autumn and winter, when they will, no doubt, sell for a good price, and enable them to purchase many articles of comfort, and perhaps some which would have been deemed luxuries by our primitive ancestors. I therefore embrace the opportunity of recommending to those who are engaged in this interesting branch of domestic economy, to have their hen-coops, in which the nurses are confined, while their young charge run at large in their vicinity, arranged *near to*, or *close by*, the paling of the garden; so that the younglings may wander through the beds of cabbages and among the cucumber vines and vegetables, and make an early breakfast of the insects, grubs and worms, which are so injurious to garden truck, without in the least degree trespassing on our superior rights.

This kind of food is eaten, by young poultry, with a high relish, and it saves the too frequent resort to the Indian-meal tub, and materially diminishes the number of those insidious invaders of our privileges, which have multiplied so alarmingly, since the *bad* boys and *idle* young men have killed off most of the birds, which were wont to keep them within harmless limits.

This judicious plan of feeding chickens and clearing a nicely cultivated garden of pernicious insects, was suggested by the wise practice of the worthy farmer who was mentioned in the last number of the Cabinet, as having a long range of stone fence, of his own making, that would repay a ride of seven miles to look at it. B.

Morello Cherry.

Mr. Editor:—Will you be good enough to ask of some of your intelligent and observant subscribers any information they might have on the subject of the disease and waste that is now affecting that valuable fruit tree, the *morello cherry?* It and the *pie cherry* will soon be extinct unless some bold efforts and thorough investigations are made to remedy the disease which now threatens their existence. Is not the black and warty excression which attacks almost every limb pervaded by an insect? and if so, cannot some means be devised to destroy it and correct its ravages. In *fine*, has there been any remedy for the evil complained of found, and by any of your readers; if so, will they not communicate it to the Cabinet for the good of the public? So hopes a subscriber.

Wilmington, Del.

For the Farmers' Cabinet.

Crows Outwitted.

A premium on crows' heads in Connecticut, as well as a desire on the part of a farmer of that state to save his corn, by diminishing their number, induced him to place a dead animal near a piece of wood-land, where he had erected a suitable brush-house, in which to ensconce himself, within proper shooting distance of the decoy. Flocks of crows visited and feasted upon the animal, when the farmer was absent from his retreat, but whenever he was lying in wait for them, with his gun, not one would venture to approach it, although with wistful eyes and watery mouths they beheld their favorite viands from the tops of the neighobring trees. He continued to visit the decoy house for many days, and, with anxious solicitude, awaited the approach of the wiley crows, but not one would venture to dine upon the delicious dead horse, whilst he was there secreted. Discouraged by his want of success, he stated the circumstance to a neighbor, who at once informed him, that he could succeed in shooting them, which his discomfitted friend had very strong doubtings about. However, they both immediately repaired, with their guns, to the brush-house, and, after a short time, the neighbor requested his unsuccessful friend to take his gun with him and go home, while he remained in the retreat. He set off across the field towards his house, and as soon as he was out of shooting distance from the animal, down came the crows to their repast, and the neighbor firing amongst them, killed a large number. The farmer, seeing his friend's success, returned to him and observed, "the crows are cunning critters, but they can't count." X.

For the Farmers' Cabinet.

Things that I like to see.

I like to see a farmer and his family neatly and substantially dressed; with an especial adaptation to their business; this indicates that they are respectable and prudent people, worthy of your confidence and regard.

I like to see neatness and soundness about a farm house, barn, outbuildings and fencing, with a small sprinkling of useful and ornamental trees and shrubs tastefully arranged about the domicil; it shows the proprietor to be a man of judgment and sound taste, and not easily jilted with humbugs.

I like to see a family of obedient, industrious children, ever willing to oblige one another; it indicates that their parents have been duly impressed with a proper regard for their present and future welfare.

I like to see boys helpful and attentive to their sisters, being ever ready to lessen their burdens and to promote their happiness; it shows good breeding, and augurs strongly their future success in life.

I like to see kindness gentleness and humanity extended to domestic animals; it furnishes a strong presumption that piety and benevolence have not gone from home.

I like to see a garden well filled with all the vegetables of the season, of the best kind, and cultivated in the best manner; it shows a proper regard to the interest and comfort of a family; and a pretty good judgment may be formed from it, of the moral character of its owner; for it is said a very good man seldom or never has a very bad garden. Rose.

THE HOME OF THE FARMER.

Still let me live among the hills,
The rocks, the trees, the flowers,
Where I have passed my earliest years,
My childhoods's happiest hours.

How oft beneath an aged oak,
Near by my father's dwelling,
Have I reposed with kindred youth,
Some playful story telling.

The birds above would plume their wings,
And raise their happy voices,
O sure 'tis a pleasant place,
Where every thing rejoices.

Surrounded by the friends I love,
And free from every fetter,
I am an independent man,
And wish for nothing better.

My little children round me sport,
So blooming, bright and healthy,
I often think that nature's gifts,
Hath made me very wealthy.

My wife is all which she should be,
Kind, gentle, prepossessing;
I'm sure if ever man was blest,
Mine is the greatest blessing.

Breeding, Rearing and Fattening of Swine—No. 2.

COMPARATIVE VIEW OF DIFFERENT BREEDS.

Mr. Western has the credit of having originally introduced this breed, which has now justly acquired great celebrity. It has, however, been claimed by Mr. Waltham, of Maldon, and Mr. Knight, of Ramsden's Crays, both eminent farmers. But the fact, as Mr. Young conjectures, appears to be "that since Mr. W.'s pigs have become so famous, those of whom he ever bought any are ready to claim their share."

The *Sussex Breed* is either a variety of the Essex, just described, or, as some assert, the original stock. It is smaller than the Berkshire, and of very handsome form, the

general size when full grown seldom exceeding eighteen or twenty stone, of fourteen pounds. The bone is not particularly small, but it is clean; the animal is of a kindly disposition to fatten, and arrives at maturity sooner than any other kind.

The *Dishley Breed*, which were at one time as celebrated as all the other kinds of Mr. Bakewell's stock, are remarkably fine boned and delicate, and are supposed to be partly descended from crosses of the Berkshire and Chinese. They were certainly carried to great perfection, and have reached to considerable weight in a very small compass, being, when fat, nearly equal in height, length, and thickness; their bellies nearly touching the ground, and their eyes scarcely to be seen for fat; the whole carcass appearing a solid mass of flesh. The form of these pigs possesses considerable beauty, and is well calculated to lay on a large quantity of meat, compared with their bone and offal. They also keep themselves in good condition on a moderate quantity of food, and are easily fattened.

Such are their general characteristics; but to these merits there are said to be opposed very considerable defects. They have been found slow of growth, tender constitutioned, and to require proportionably more food in fattening than the large breeds. It should, however, be remarked, that the experiment upon which the latter assertion is founded, was made by feeding *two* Dishley hogs against *one* from a cross between a Berkshire and a large white Shropshire hog; and that while the Dishleys consumed *jointly* the most food, the other weighed singly more than the two. This, however, is not alone decisive of their respective merits; which could only be accurately ascertained by a reference to the butcher; as a material difference would no doubt arise in favor of the sale of two small animals, when opposed to that of a single large one.

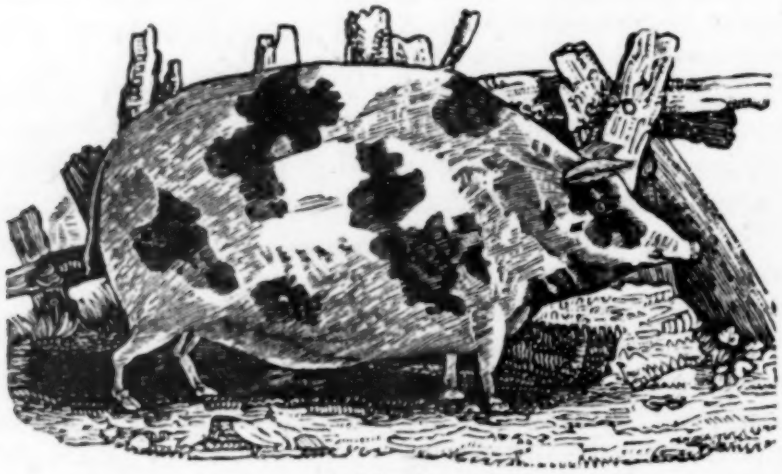

Fig. 59.

IV. The Woburn Breed—of which the animal portrayed above was exhibited at Lord Somerville's cattle show, in 1806—is a new variety, introduced by the Duke of Bedford. They are of various colors, well-formed, hardy, very prolific, kindly disposed to fatten, and have attained to nearly twice the weight of some other hogs within the same given period of time.

Besides these there are:—

The *Hampshire*, the specific characters of which are—color chiefly white; neck and carcass long, and the body not so well formed as the Berkshire pigs; but they fatten kindly to a very great size and weight, and make excellent bacon.

The *Northampton*, which are also white, with very short legs, ears enormously large, often sweeping the ground; size large, with coarse bone and hair, and many bristles. They fatten to a great size, but not very kindly, and are reared chiefly in the county of Northampton.

The *Shropshire*, which appear to be a variety of the Northampton race, to whose characteristics they bear a great resemblance; fattening to a large size, but not so kindly disposed as the Berkshire; yet they are both favorites with the distillers who seem to require a coarse heavy pig to consume their wash and grains with advantage.

The *Yorkshire*, which are similar in color to the Berkshire but with longer ears and coarser hair. They have long legs, flat sides, and are coarse in the bone; they are also slow feeders; but, for the reasons already assigned, they, as well as the Northampton and Shropshire, are in esteem with the distillers.

The *Lincolnshire*, with well-formed heads, and ears of a medium size pointing forwards, and curled at the lips; they are long and straight from the head to the tail, and of sufficient breadth; round in the carcass and deep in the sides; the skin and hair thin. The true bred pigs of this race are white, and rather tender; but they reach to thirty stone of fourteen pounds, and in point of profit

may be ranked next to the Berkshire. This breed is also well known (with some occasional variation) as the *Norfolk* and *Suffolk*. The *Cheshire*, of various colors, but chiefly marked with broad patches of black, or blue, and white, have large heads, with long pendant ears; are of a great length, but proportionably narrow; curved in the back and flat-sided; large boned and long legged, with much loose skin, and altogether ill-formed; but they grow to an extraordinary weight, and are the largest kind of pigs in the kingdom except

The *Rudgwick breed*, which take their name from a village on the boarders of Surrey and Sussex, and are remarkable for the enormous size to which they reach, each of these; breeds has its several advocates; but as their respective value does not, as in other species of stock, depend on soil and situation, these differences of opinion can only be ascribed to the want of sufficient comparative experiments, or to prejudice. A very competent, and apparently a very candid judge of the merits of the principal kinds, gives it as his decided opinion that the Berkeshire rough-haired, feather-eared, curled pigs, are superior in form and flesh to all others; even to the best Chinese.

With regard to these two breeds, that opinion must have been formed on fair experiments and due consideration of their respective value, for he mentions having fatted a Chinese sow to the weight of forty stone, of fourteen pounds at three and a half years old,* and the quality of the bacon, of both kinds fatted and cured alike, was decided by a party of gentlemen at Lord Conynghams' table in favor of the Berkeshire. In this we so far, unhesitatingly coincide; but from all the other information we have collected on the subject, we are inclined to think that Mr. Westerns' Essex breed, may fairly compete with either; and the Woburn breed, has not yet been sufficiently tried to admit of a decisive comparison.

To these also, there must, in justice be added, a breed partaking of the Essex blood and generally known as the *Essex* and *Hartford breed*. It was introduced by Mr. Dodd, of Chenies, in Buckinghamshire, (a most successful breeder.)

True politeness.—To prefer other peoples' convenience to your own.

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*The height of this pig was	2ft.	3 in.
Length	4	11.
Breadth across the loins,	2	0.
Girth	9	10.

Horse Rake.

A subscriber inquires where the horse rake can be purchased. We cannot give the desired information. The accompanying descriptions and wood cuts, will, however, we hope, enable any common carpenter readily to construct one, either of the common or revolving rake.—*Genesee Farmer.*

THE COMMON HORSE RAKE.

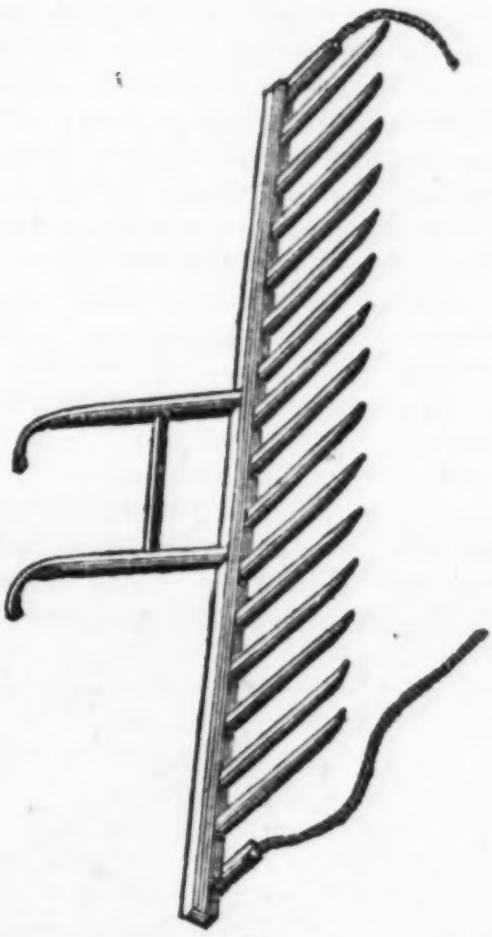


Fig. 60.

This is made of a piece of strong scantling, three inches square and ten feet long, into which about fifteen teeth are inserted horizontally, and made of strong white ash or other tough wood. The teeth should be about 22 inches long, and one inch by one and three quarters at the place of insertion, and tapering on the under side, so as to give them a slight turn upwards at the point, to prevent their running into the ground while using. The draught ropes are attached to the end of two projecting pieces of wood parallel to the teeth, at each end of the rake. These projecting pieces should be about one third of the length of the teeth. Those unskilled in the use of the rake, sometimes attach the ropes at once to the ends of the head; in this way it becomes almost entirely unmanageable. The forward ends of the draught ropes are to be fastened to the horse's collar, leaving space enough between the horse and rake for the collecting hay. Handles, like those represented in the figure, (fig. 60) are to be inserted in the head near

the middle, for guiding the teeth and lifting the rake from the ground when necessary.

In using this rake, instead of the teeth moving onward upon their points as in the common hand rake, they run along flat upon the ground, passing under and collecting the hay; when full, the handles are thrown forward, the rake emptied, and lifted over the winrow for another load. The rake thus passes backwards and forwards across the field, always emptying opposite the last heaps, and thus forming regular winrows at right angles with the path of the rake. A few hours practice will enable any one to use this rake without difficulty, the only skill required consisting in keeping the points of the teeth just so low as to pass under all the hay and yet not run into the ground. When small obstructions occur, the handles are depressed, thus causing the teeth to rise, and the rake passes freely over. Large obstructions, as stumps and stone heaps, require the rake to be lifted from the ground.

The chief recommendation of this kind, is its cheapness and simplicity. A good one need cost no more than two dollars. It may also be used on rougher ground than the revolving rake, as it is more easily lifted over obstructions. Where the ground is very uneven the teeth should be much shorter. When one becomes well accustomed to the use of it, work may be done nearly as fast with this, as with a revolving rake, though much more laborious. Twelve acres of hay, part of it yielding nearly three tons to the acre, on a meadow of the writer, were raked into winrows, by means of one of these rakes, in about *six hours*, working time. It possesses another advantage over the revolving rake—it may be used for scraping the winrows into heaps for drawing, and if the hay is stacked in the field, for drawing the hay to the stack. A man with a rake and horse, not only raked the hay, but drew it at the same time to the stack, a distance of from ten to twenty rods, as fast as an active man could pitch with a fork. A hand rake need scarcely ever be used on the meadow, as all the scattered hay may be raked up in a short time, after the rest of the hay has been drawn off.

The horse rake is very useful in raking stubble of wheat, and eminently so in pulling and gathering peas.

Shafts, instead of ropes have been attached to the head of the rake, and have been strongly recommended; but they diminish the simplicity of the rake, and appear to possess no advantage on the whole, and for gathering and drawing hay, are positively detrimental.

Fig. 61.

THE REVOLVING RAKE.

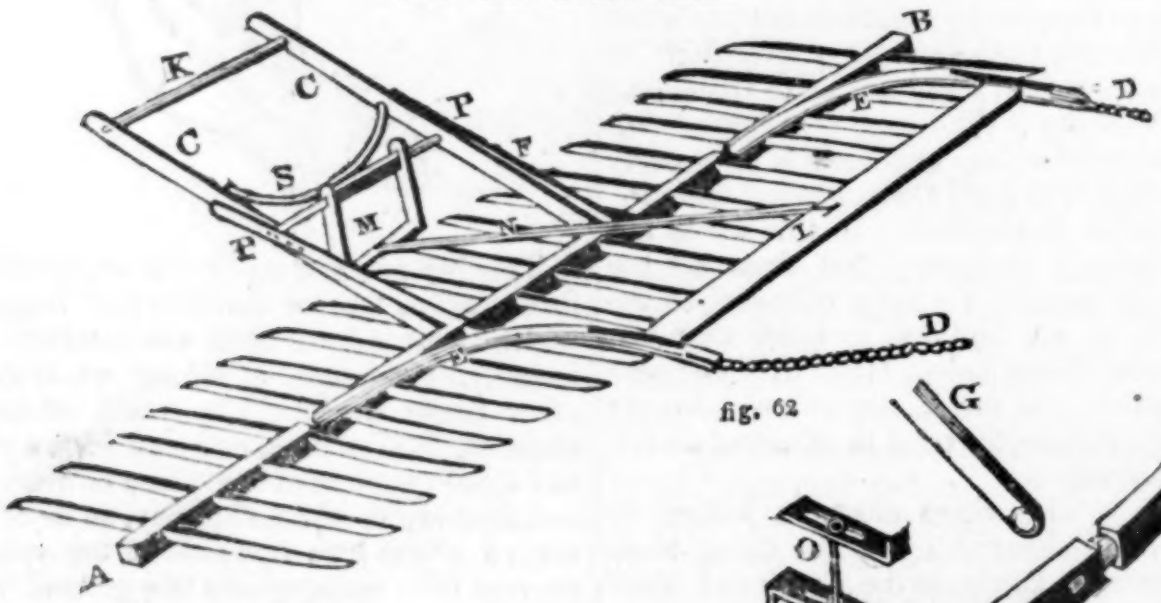
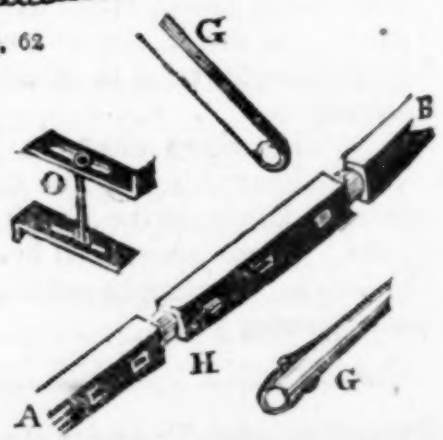


fig. 62



This is much more complex in its construction than the common horse rake, but possesses advantages over it in ease and expedition in raking. Its peculiar advantage is the facility with which it may be unloaded, requiring for this purpose but a slight elevation of the handles, and without stopping once in crossing the whole breadth of the meadow.

Its construction is as follows:—The head A B, fig. 61, is a piece of strong scantling, three inches square and ten feet long, through which eighteen holes, one inch square, are made to receive the teeth, which are pieces of the strongest white ash, one inch square and three feet long, projecting equally on both sides of the head when inserted, and forming

a double row of teeth, each about eighteen inches long. The draught chains or ropes D D, are attached to the forward ends of two curved arms E E, which are connected at their other ends to the head of the rake by iron straps passing round the head so as to allow it to revolve freely. G, fig. 62, represents a portion of one of the curved arms, showing the hole formed by the iron strap, and H represents a part of the head which turns in this hole. These arms are held firmly together by the cross piece I. An improvement in the curved arms is made by constructing them of two pieces at right angles, in a form similar to a carpenter's square, the first or shortest piece rising perpendicular from the head, and the other projecting forward, and to which the draught chains are attached. By this construction, more space is allowed beneath these arms for the collection of the hay.

The cross rod K, connecting the handles C C, serves for guiding and managing the rake. These handles are connected to the head by a contrivance precisely similar to that of the curved arms. At the middle of the handles is a cross rod P P, upon which turns the small frame M, which is connected (by turning joints,) by means of the rod N, to the cross piece I. This rod must be of just such length, as to cause the frame M, when pressed down upon the teeth by the handles, to touch them within about half an inch of their points; by this, the teeth are pressed flat upon the ground while raking. To empty the load this frame is raised by the handles beyond the reach of the teeth, and they pass it freely without touching. The rake is unloaded by means of the following contrivance. Outside of the handles C C, are two pieces of wood F F, turning freely upon the two projecting ends of the rod P P, as pivots, with their lower ends resting upon pieces of iron fastened crosswise on the head of the rake, just outside of the joints connecting the handles to it. The shape of these pieces of iron is shown in a detached view at O, fig. 62. When the handles are raised, the pieces F F, are thrown forward on these pieces of iron, until they strike the projecting part of them, when they immediately act as braces, and cause the rake to rise with the handles. The points of the teeth thus strike in the ground, and the horse continuing in motion, causes the rake to make a semi-revolution, emptying the load, and throwing the back row of teeth forward to be filled as before. The handles C C, should be perfectly parallel, that the pieces F F, may play freely. S, is a strong iron brace, fastened at each end to the handles, and at the middle to the cross rod P P. The cost of this rake is about six dollars. The revolving rake is better adapted for use on large farms and smooth meadows, and the common horse rake on small farms and rough meadows.—*Genesee Farmer.*

For the Farmers' Cabinet.

Horticultural Society.

The monthly meeting of the Pennsylvania Horicultural Society, was held on the evening of the 17th April, in the Hall, under the Atheneum—the President in the chair.

The Committee on Vegetables awarded the premium at the Society's intermediate meeting of the 31st of March, for the best six heads of forced Lettuce, to James Beadle, gardener, Turner's Lane, who exhibited fine plants of the Tiger Lettuce; they also noticed some fine heads from James McKee, Burlington, N. J., gardener to Horace Binney.

The committee on plants and flowers, awarded the premium for the best display of plants in pots to Robert Buist, who exhibited Amaryllis Johnsoni, Gesneria Spicata, Gloxinia, candida, G. caulescens, G. speciosa flora alba, Ixora coccinea, Epidendrum cochleatum Azalea Siucusis, a double purple Tropœolum tricolorum var, Euphorbia Splendeus, Burchellia capensis, verbena Tweediana, Brachysema latifolia, Diplacus punicus, a fine seedling Carnation, called Lord Byron, Rhododendrum pictum novum, yellow tea rose, Rosa Thea Lilacina, Hakea acicularis, Ixia Kermisina, Pelayonium Lord Denman, P. Etna, P. Dennis's perfection, P. ne plus ultra, P. Superbissima, P. Blue beard, P. pur purea cœrulea, P. Diversum, P. Lucifer, P. Adelina, P. Wheeleri, P. Queen of Scots, and three fine seedlings not named.

The premium for the best bouquet was awarded to John Sherwood, Laurel Hill, and recommended an honorary one to Robert Kilvington, gardner to Wm. Lloyd.

The Committee on Vegetables awarded the premium to J. Smith, gardener to N. Biddle, for the best display of vegetables, having exhibited a large quantity of very superior mushrooms.

Wm. Chalmers, Sr., gardener to Mr. Stot, exhibited some very superior Lettuce, some fine specimens of the oak leaved Lettuce.

The Society's premium for the four best forced Cucumbers, was awarded to Robert Kilvimgton, gardener to Wm. Lloyd.

Owing to the severity of the weather, the show of plants was limited from what is generally brought forward at this meeting; the tropical plants could not be brought in from the country; however those that were exhibited were of the best quality, and some of them new and very pretty. We allude to the Tropœlum trocolorum var, being a variety of the old one, only much superior in color, and a very free flowerer; the Rhododendrum pictum, is a beautiful plant, the flower a delicate white, dotted over with small dark spots

on the back petals; the Geraniums were fine, and one of the seedlings, although not of a superior color, is one of the best formed flowers we have seen, the petals being so round and stand so well up. Both the vegetables and plants do great credit to the city and suburbs, and last, although not least, the meeting was graced with many a bonnie lassie.

G. Watson, Rec. Sec.

To Correspondents.

Several interesting articles for the present number, have been unavoidably deferred until our next—among them, Observer No. 14—the Veterinarian No. 4, and a communication from an "Old Farmer."

Quantity of Rain which has fallen in each month since January 1, 1838.

	inches.
1st month,	2,20
2d month,	2,19
3d month,	3,17
4th month,	3,58

Philada. Hospital, May 2, 1838.

For the Farmers' Cabinet.

DEPOSITORY OF AGRICULTURAL IMPLEMENTS.

Call and see.

Having just visited the interesting and extensive establishment of James Mitchell, importer and manufacturer, No. 12 Old York Road, opposite the old Indian weather-cock, where are kept wheat fans, straw-cutting boxes, corn shellers and grindstones, hung and unhung, in all their varieties, with numerous other articles peculiarly adapted to the use and convenience of farmers. I embrace the opportunity of referring them to this great Bazaar, where they will see some improvements in many of those useful implements that were at least entirely new to me, and I think will gratify agriculturists generally. It has long been deemed important that there should exist in Philadelphia a depository, where all new and useful implements for farming purposes should be exhibited and sold; and this situation seems as well adapted for the purpose as any other, particularly as Mr. Mitchell, is a man of high respectability, an old well known citizen, and very obliging and moderate in his charges for the articles manufactured under his own eye. This is written without his knowledge, as it was thought so useful and meritorious an establishment ought to be made known to the 10,000 patrons of the Farmers' Cabinet. R.

Philadelphia, May 4, 1838.

AN ACT

TO PROMOTE THE CULTURE OF SILK.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met and it is hereby enacted by the authority of the same, That from and after the passage of this act, whenever any person or persons, either individually or collectively, shall raise any silk within this commonwealth, he, she or they, shall be entitled to draw from the State Treasury a premium of twenty cents, for each and every pound of cocoons raised by him, her or them, and fifty cents per pound on every pound of good silk by him, her or them reeled from cocoons so raised, and the person or persons so claiming the premium aforesaid, shall first exhibit the cocoons raised and the silk reeled as aforesaid, to one alderman or justice of the peace, within the proper city or county where they shall have been raised, and the said alderman or justice shall thereupon examine the person or persons claiming the premiums as aforesaid, upon his or their oath or affirmation, and shall require the party so claiming the premium, to swear or affirm that the cocoons were raised in the state of Pennsylvania, after the passing of this act, and that the premium has not before been claimed by or paid to any other person, and also, in relation to such other facts, matters and things as is, or may be in their opinion connected with the raising or reeling of the same, and upon the evidence being satisfactory to his mind, he shall thereupon make out a certificate under his hand and seal of the same, and the respective city and county treasurers upon the presentation of the said certificate or certificates, are hereby authorized and directed to pay the amount of the same of any moneys belonging to the commonwealth, which may then be in their hands, and the state treasurer in settling the respective accounts of the several city and county treasurers, shall, and he is hereby authorized and directed to receive the said certificate as equivalent to the amount of money paid out therein in conformity with the provisions of this act, and the same shall be audited and adjusted in like manner as other payments out of the treasury are now audited and adjusted by law.

Section 2. Any false swearing under this act shall be indictable and punishable as perjury in other cases is punished, and any fraudulent procuring of the premium on cocoons or reeled silk under the provisions of this act, shall be deemed a misdemeanor, and on conviction punishable as such, by fine and imprisonment, at the discretion of the court.

Section 3. The weighing the cocoons, administering the oath or affirmation required by this act, and making out the certificate, the justice shall be entitled to a fee of twenty-five cents, to be paid by the person applying for the same.

Section 4. The provision of this act shall not continue or remain in force for any greater length of time than until the first day of January, one thousand eight hundredtand forty-three.

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